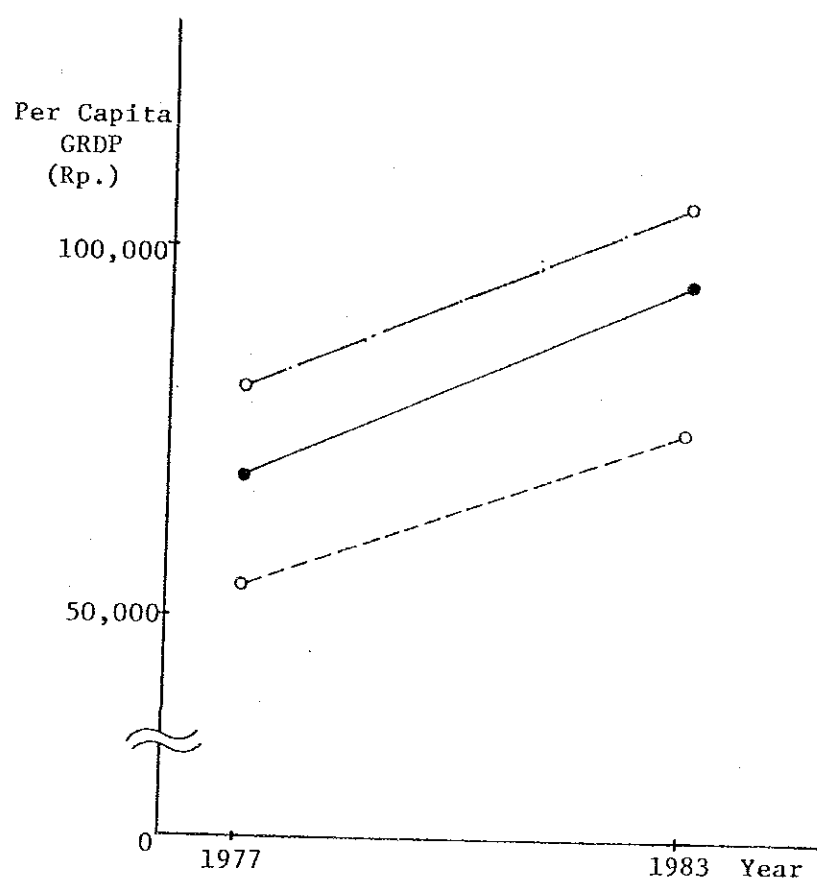Figure 14.7.b   Predicted Growth of Per Capita GRDP When
the Recommended Strategy is Taken

Legend

——————— Province

—————— Minus Areas

——·—— 65% of Per Capita
GRDP of the Nation

Source: Study team.

is complementary with Cilacap in many ways. First, college education is provided in Banyumas whereas not in Cilacap. Second, Kabupaten Banyumas has mountain resort areas such as Baturaden whereas Cilacap does not. Similarly, Kabupaten Banyumas is able to provide poultry and livestock products as well as upland crops whereas Cilacap is not suited for them. Above all, Kabupaten Banyumas is better suited to cultural and educational activities. In this sense, the area around Purwokerto should be given priority attention.

14.079   As to the areas designated by Revised Mixed Strategy, particular attention should be given to those areas which are either bordering with or intersecting with the development belt and a minus area. In considering development prospects and the geographic relationship between the development belt and the minus areas, the areas around Semarang are considered to merit priority attention. One reason for this is that when the port of Semarang is improved, there will be substantial increases in the flow of commodities through the prot, and, in response, there will be increases in industrial activities in and around Semarang. Of course, such increases will involve increases in commercial activities in Semarang. Such growth potential can be spread further if there is cautious planning in advance. One feasible direction of this spreading is along the development blet. However, in order to help the development of the minus areas, efforts should be made to spread growth toward minus areas.
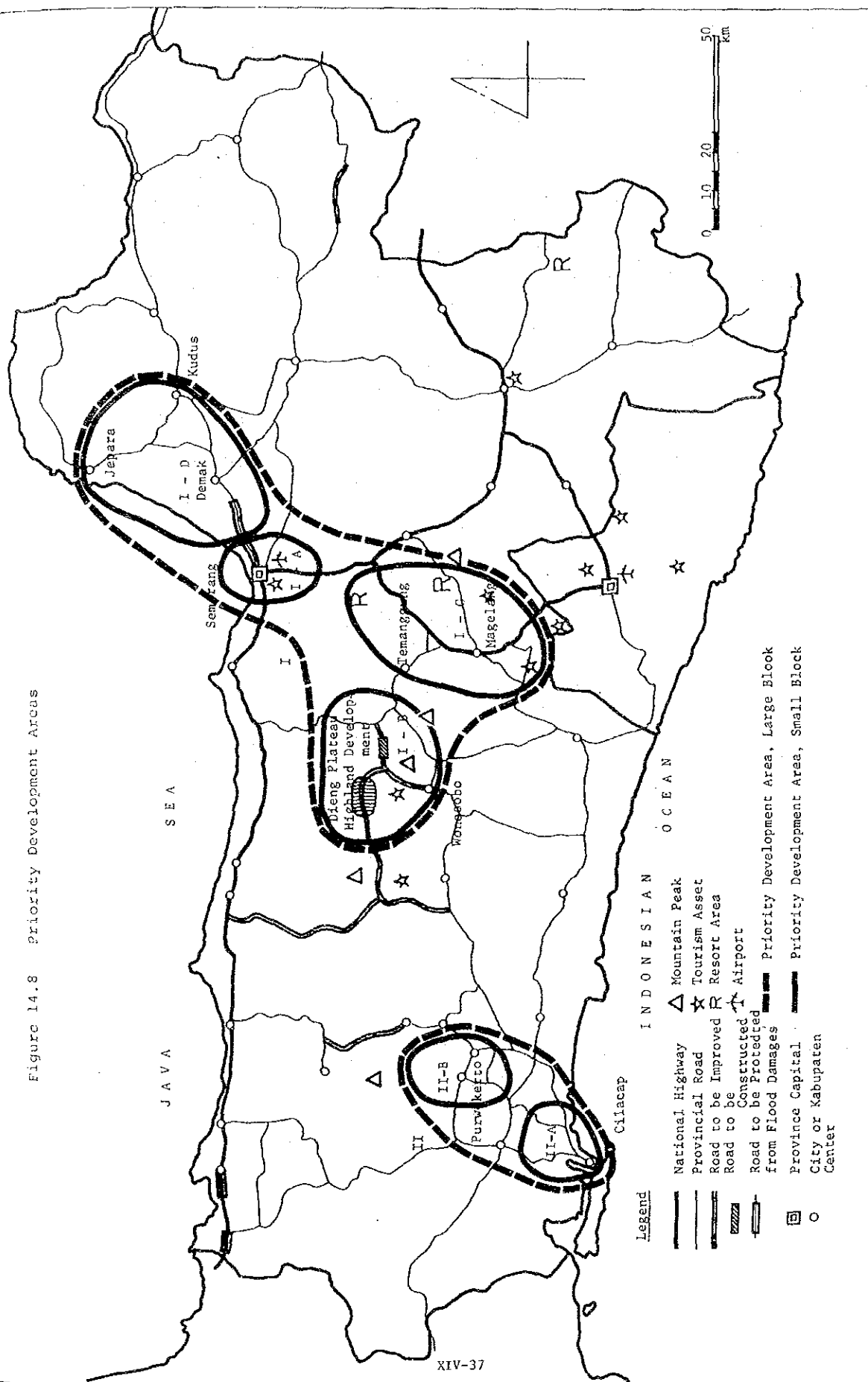
14.7.2   Priority Development Areas

14.080   On the basis of the above reasoning, we have delineated two large blocks of Priority Development Areas, each of which is further divided into small blocks. They are shown in Figure 14.8, and are as follows:

Priority Development Areas

Large Block	Small Block	Major Areas Contained
I	A	KDY Semarang
	B	Dieng Plateau, Wonosobo
	C	Magelang, Temanggung, Kopeng, Bandungan
	D	Demak, Kudus, Jepara
II	A	Cilacap
	B	Purwokerto, Banyumas, Baturaden

Figure 14.8   Priority Development Areas

14.081   The characteristics of development aimed at each Priority
Development Area and its major elements are described below:

      (a) <u>Priority Development Area I</u>

      (i) <u>General Objectives</u>

14.082   ·The development of this area should aim at capturing as much
development potentials of the Province as possible. In addition, the
development of this area should be undertaken for the purpose of
spreading development from Semarang toward and into the minus areas.
Specifically, two minus areas will be benefited from intensive development
of this area.

      (ii) <u>Development Sectors</u>

14.083   There are three sectors which will be paid special attention
for development: industry, tourism and agriculture. Industrial
development will be promoted at Semarang, Kudus, Magelang, Temanggung
and the Dieng Plateau. The industry at Semarang will be oriented to
the distribution hub existing in Semarang. The industry at Kudus will
be based on printing and tobacco. The industrial development in all
other locations will be of agro-processing type. Thus, their development
are dependent on agricultural development in surrounding areas.

14.084   This Priority Development Area abounds in tourism resources.
Among them, two most important will be Borobudur and the Dieng Plateau.
In addition, resort areas such as Kopeng and Bandungan should be brought
into the tourism development scheme. In addition, wood carving products
made at Jepara should be brought into the scheme of tourism development.
Tourism should cater to foreign as well as domestic tourists. Within
the system of tourism locations existing in this area, Semarang and
Magelang should play a leading role.

14.085   Agriculture is another important sector for the development
of this area. The Demak-Kudus area requires dependable irrigation for
production increases, whereas the Dieng Plateau need to specialize in
highland crops catering to special markets. Other upland areas will
be encouraged to be developed for other cash crops such as peanuts and
soybeans as well as poultry and livestock.

      (iii) <u>Development Instruments</u>

14.086   The folloiwng instruments will be used for development:

Area	Sector	Instruments
I-A	Industry	Port Development Urban Planning, Industrial Estates Water Supply, Highways, Industrial Extension Services
	Urban Development	Urban Planning, Housing Site Development KIP
I-B	Agro-Tourism	Highways Agricultural Land Development, Agricultural Extension Services Hotel/Restaurant/Resort Complex Preservation and Restoration of Historic Assets Industrial Sites Power Supply
I-C	Tourism/Resort	Hotel/Restaurant/Resort Facilities Recreation Parks Preservation and Restoration of Historic Assets Development of Scenic Sites Tourist Agencies
	Agriculture	Agricultural Extension Services Marketing Organizations
	Agro-Processing	Industrial Extension Services Industrial Estates Access to Loans
I-D	Agriculture	Water Reservoirs Drainage Improvement Tertiary Canal Development Road Protection from Flood Damages Marketing Organizations
	Agro-Processing	Industrial Extension Services Procurement and Marketing Organizaitons Access to Loans
	Industry	Industrial Extension Services Better Roads and Communication Access to Semarang Access to Loans

(b) Priority Development Area II

(i) General Objections

14.087   The development of this area should aim at facilitating fuller
realization of industrial development potentialities at and around Cilacap.
For the immediate future, emphasis should be placed on developing rapidly
the relatively small area centering around Cilacap and Purwokerto.

(ii) Development Sectors

14.088   The principal development sector in this area is industry at
Cilacap.   But, the industries at Cilacap should not compete with those
in the Semarang area.   Due to the relative isolation of Cilacap, this
area needs to specialize in heavy industries which can effectively
utilize the deep-sea port at Cilacap.   At the same time, Cilacap should
function as a center of distribution of industrial materials.

14.089   To further encourage these activities, the development of support
activities is needed.   The support activities include hard infrastructure
such as highway, power supply and the supply of industrial water, as
well as soft infrastructure such as cultural, educational and recreational
opportunities.   In addition, a better supply of agricultural products
is also desirable for the promotion of development in this area.

14.090   Development efforts in Development Area A should sharply aim at
selective development of heavy industries and distribution systems,
whereas efforts in Development Area B should be directed for enrichment
of cultural, educational and recreational development for complementing
activities to be undertaken in Development Area A.   This complementary
specialization of activities by these two areas is based on the differences
in natural and cultural backgrounds of the two areas, but is also a
desirable strategy for spreading the development based in Cilacap.

(iii) Development Instruments

14.091   The following instruments will be used for development.

Area	Sector	Instruments
II-A	Industry	Improvement in Power Supply
		Improvement in Water Supply
		Expansion of Industrial Sites
		Highway Access Improvement
		Interagency Coordination
		Technical Assistance to the Province and the Kabupaten
		Better Access to Loans
	Marketing	Highway Access Improvement
		Better Access to Loans

(continued)

Area	Sector	Instruments
II-B	Agri- culture	Agricultural Extension Services for Diversification Better Access to Loans Improved Marketing Organizations
	Resort	Improved Highway Access Site Development
	Education & Culture	Expansion and Improvement in Facilities and Staff

(c) Immediate Actions Needed

14.092   Two studies, one for each area, should be started for planning and coordinating development activities within the areas.   Each study will examine the current situation of the development area carefully and identify ongoing and committed projects and will identify other desirable projects for the purpose of the development of the respective area and coordinate them into a consistent program for implementation.

14.093   The study for Priority Development Area I will be undertaken by an expatriate experts which is supported by a counterpart team of Indonesian nationals.   The study for Priority Development Area II will be undertaken by a team of Indonesian experts who are assisted by expatriate experts.

14.094   Required man-months for these two studies are estimated as follows:

(1) Study for Priority Development Area I

(Unit: Man-Months)

Specialist	Expatriate Team	Counterpart Team
Project Manager	10	10
Water Resource Engineer	10	10
Agronomist	10	10
Industrial Planner	6	6
Urban Planner	10	10
Tourism Planner	10	10
Transport Planner	6	6
Economist	10	10
Marketing Expert	6	6
4 Special Consultants	8	0
Total	86	78

(2) Study for Priority Development Area II

| | | (Unit: Man-Months) |
Specialist	Local Team	Expatriate Advisors
Project Manager	12	0
Industrial Planner	12	12
Public Utility Engineer	12	12
Agronomist	12	0
Architect	12	0
Urban Planner	12	0
Transport Planner	12	0
Economist	12	0
Total	96	24

APPENDIX A

DYNAMICS OF THE POPULATION

APPENDIX A

DYNAMICS OF THE POPULATION

A.1 Fertility

A.1.1 General

A.001   The dynamics of a population, its growth and decline, is
determined by three factors: birth rate, death rate, and social
mobility. For the decade of 1960s a simple arithmetic relationship
among these factors is roughly estimated as follows:

						(Unit: Percent)
	Crude Birth Rate		Crude Death Rate		Social Mobility	Population Growth
Central Java	4.2	−	2.1	−	0.4 =	1.7

A.002   Due to the limited data available which are reliable enough
for full use the analysis of each factor must be considered to be
tentative.

A.1.2 Crude Birth and Fertility Rates in the Past

A.003   Three estimates of the Province's crude birth rate, for the
different periods of 1961, 1971 and average of the 1960 to 1970, are
presented in Table A.1. From the table it is clear that the crude
birth rate decreased through the 1960s in Central Java as well as in
the entire nation. Also, it is seen that Central Java has had a
slightly lower crude birth rate than that of the entire nation. For
further analysis, it is necessary to consider fertility rate estimates.

A.004   Table A.2 and Table A.3 are derived from an estimate of
fertility rate based on the report of children-ever-born in the 1971
census by the Central Bureau of Statistics (BPS). The levels of
fertility in Central Java in the three duration in 1960s are contrasted
with those for the other areas in Java Island, and for the entire
nation in Table A.2. For the decade of the 1960s, every 1,000 women
bore 4,465 children in the urban area and 5,485 children in the rural
area of the Province. The figure for the whole Province in the same
duration, that is 5,380, is lower than its counterparts for West Java
or those for the entire nation, but considerably higher (700) than
that for East Java. Within the Province, the urban-rural difference
is enormous, i.e. the rural fertility rate is 23 percent higher than
that of the urban area. Also from the tables, it is quite clear that
in Indonesia, and in the whole island of Java, fertility rates reached
their climax in the mid-1960s. If the 1961 to 1963 average is taken
as a faseline figure (100), for all of Indonesia the figure was 107
in the middle of the decade and 103 at the end of the decade; for the
urban area of Central Java, it was 104 and then 100; for the rural
area of Central Java, it was 109 and 103.

A.1.3   Age-Specific Fertility Rates

A.005   Table A.3 presents age-specific fertility rates for Central
Java and for the entire nation in the periods of 1961 to 1963, 1964 to
1966, and 1967 to 1970. The estimates are based on the 1971 census.
For 1967 to 1970, the figures for the whole Province of Central Java
does not show a much different pattern from those for the entire
nation except that for the age brackets 15 to 19 and 25 to 29 and
over the figures remain slightly lower than the national average.
In terms of the urban-rural differential within the Province, the
peculiar fact is that the fertility rates for the urban area are not
much smaller than those for the rural area for the brackets beyond age 25
to 29, while those for age 20 to 24 and age 15 to 19 are 20 percent and 47
percent smaller than those for the rural area. Another estimate for the
fertility rate based on a sample survey conducted in 1973 showed that
for the brackets of age 20 to 24 and age 25 to 29 the figures for the
urban area in fact slightly exceed those for the rural area in 1969 to
1970, while those for the brackets below age 20, the urban figure is
smaller than the rural one by 29 percent (see Table A.4). The same
study also made it clear that in the rural area the fertility rate is
relatively high in the higher age brackets, and mothers beyond age 40
continue to bear children. In short, the sharp contrast in fertility
between the urban and the rural areas comes from the high possibility
of pregnancy during teen years and the relatively prolonged duration
of possible fertile age in the rural area on the one hand, and from
the concentration of pregnancy in the age 20s and early 30s in the
urban area on the other.

A.006   Seen over time, Table A.3 shows that the trend in the urban
area is characterized by a moderate increase in fertility in the
brackets between age 20 and 34, and by a sharp decline for the brackets
age 15 to 19. In contrast, for all brackets below 35 to 39 fertility
rates climbed in the mid-1960s and then dropped at the end of the

Table A.1   Crude Birth Rate[1/] in 1961, 1960 - 1970 Average and 1971

(Central Java and Indonesia)

| | (Unit: Babies per 1,000 Population) | | |
	1961 [2/]	1960-1970 [3/]	1971 [4/]
Central Java	47	42	37
Indonesia	48	44	–

Notes: 1/ Number of Birth for a 1,000 population per year.

2/ Estimate by S. Iskandar.
S. Iskandar, Some Demografic Studies on the Population in Indonesia, Jakarta, 1962.

3/ Estimate by SGM Mamas and G. Mc. Nicoll.
SGM Mamas and G. Mc. Nicoll, The Demographic Situation Indonesia, New Orleans, 1973.

4/ Estimate Based on 1971 Census and BPS, Estimates of Fertility and Mortality in Indonesia, Jakarta, 1976.

Table A.2   Total Fertility Rate[1/] in Central Java

| | Central Java | | | East Java | West Java | Indonesia |
	Urban	Rural	Urban & Rural			
1961-63	4,405	5,290	5,320	4,550	5,465	5,385
1964-66	4,560	5,765	5,590	4,835	6,090	5,760
1967-70	4,420	5,430	5,270	4,650	5,865	5,520
1961-70 Average	4,465	5,485	5,380	4,680	5,810	5,550

Note: 1/ Number of children born per 1,000 women during their life-time.

Source: Biro Pusat Statistik, Estimate of Fertility and Mortality in Indonesia, Jakarta, 1976.

Table A.3   Age Specific Fertility Rates[1] in Central Java

Based on 1971 Census

	Age 15-19	20-24	25-29	30-34	35-39	40-44	45-49
Central Java Urban							
1961-63	122	222	223	177	103	34	nd
1964-66	109	234	236	185	106	37	nd
1967-70	82	235	244	183	103	37	7
Central Java Rural							
1961-63	182	255	250	192	126	50	nd
1964-66	204	292	275	212	123	47	nd
1967-70	155	292	269	203	118	49	13
Central Java Average							
1961-63	180	257	253	198	126	50	nd
1964-66	192	284	269	207	120	46	nd
1967-70	144	284	265	199	115	47	12
Indonesia							
1961-63	179	258	255	197	130	58	nd
1964-66	199	284	275	210	128	56	nd
1967-70	155	286	273	211	124	55	17

Notes: [1] Number of children born per 1,000 women for each age bracket.
nd indicates there is no data.

Source: Same as [4] of Table A.1.

Table A.4 Age Specific Fertility Rate[1] in Central Java Based on

1973 Fertility – Mortality Sample Survey

	Age 15–19	20–24	25–29	30–34	35–39	40–44	45–49	Total[3] Fertility Rate
Urban								
1959–63	144	247	263	709	188	78	0	5,670
1964–68	100	281	249	218	127	78	0	5,290
1969–70	97	313	277	210	120	45	0	5,310
1971–72[2]	89	258	250	184	137	30	6	4,770
Rural								
1959–63	176	758	245	199	132	63	25	5,500
1964–68	158	265	261	211	136	72	25	5,600
1969–70	136	284	267	233	148	73	17	5,790
1971–72[2]	104	230	200	172	108	51	15	4,400

Notes: 1/ Definition is the same as in Table A.3.

2/ Estimate for the years 1971–72 is thought to be biased downward by the survey method.

3/ Definition is the same as in Table A.2.

Source: Universitas Indonesia, Fakultas Ekonomi Lembaga Demografi, Indonesian Fertility Mortality Survey 1973, Preliminary Report, Jakarta, 1974.

decade; but the trends through the decade are not consistent in the sense that whereas age 15 to 19 bracket appears to have shown a remarkable decrease at the end of the decade, for the brackets age 20 to 24, age 25 to 29, and age 30 to 34 fertility rates moderately increased over the decade. In summary, examination of the age-specific fertility rates enables us to safely conclude that: (1) the major urban-rural difference in fertility comes from the relatively concentrated duration of pregnancy in urban areas; and (2) that the urban area seems to be intensifying this tendency while the rural area is gradually approaching this pattern. These latent factors were behind the rise and decline of fertility rate of the Province in the 1960s.

A.1.4 Factors Affecting the Fertility Rates

A.007   How the fertility rates are affected by social and economic factors in the region is another problem. Table A.5 shows how fertility rates vary by levels of educational attainment. It is remarkable that fertility rate increases -- in both urban and rural areas -- as educational attainment rises and that except for the population with completely no education fertility rates are greater for the urban area, not for the rural area. This finding is somewhat to be discounted since the more educated women are more likely to report correctly, and less-educated women would tend to report the number incorrectly probably with a downward bias given to the rate of mortality infancy.

A.008   Even so, however, the figure that women in the urban area who have had primary education bear 1.5 times more than those with no education and 1.4 times more in the rural areas is quite striking. Since those with better education are supposed to belong to the wealthy class, the inference that comes from this finding is that the more rich the income level of a woman's family is the more children she bears and the often-advocated effect of education, i.e., its diffusion of conception of small-size family is in fact very limited in face of this causality in the setting of Central Java.

A.009   Another estimate was made for the whole island both of Java and Madura, and for the whole nation based on the 1971 Census. See Table A.6. This survey showed that the tendency we observed in Central Java in fact prevails in the entire nation: in 1965 to 1969 the highest fertility is found among primary school graduates (5,800 per 1,000 mothers for Java and Madura, and 6,205 for Indonesia); those for high school graduates are higher than those for people with less than primary school education, although the graduates from higher educational institutions tend to have much smaller family size. This estimate also indicates it is only among high school graduates that fertility rate dropped in the latter half of the 1960s as compared with the former half of the decade and for the other categories the rates showed a moderate increase except for the academy and university graduates, who showed a pronounced 24 percent increase.

Table A.5   Marital Fertility Rates[1] by Education and

by Rural & Urban Residence,

Central Java, 1965 - 70

	No Education	Not Completed Primary	Primary and Above	Average
Urban	201	276	306	244
Rural	213	267	289	238

Note: 1/ Total births per 1,000 married women 15-44 years old.

Source: Universitas Indonesia, Fakultas Economi, Lembaga
Demografi, Preliminary Report Indonesia Fertility
Mortality Survey, 1973 Central Java, Jakarta, 1974.

Table A.6   Total Fertility Rates[1] of Woman by Education (1960 - 69)

	No School	Elementary	High School	Academy & University
Java and Madura				
1960-64	4,565	5,445	5,420	2,880
1965-69	4,970	5,800	5,260	3,695
Indonesia				
1960-64	4,860	5,880	5,555	2,930
1965-69	5,325	6,205	5,495	3,635

Note: / Definition is the same as Table A.2.

Source: BPS 1976, op; cit.

A.010   From the discussion above the following three points are to be noted. First, in the whole Province fertility rate reached the supposed maximum point in the midst of 1960s and then began to decline gradually as was the case for the entire nation, although its trend in thé 1970s is not known. Second, this decline took place while there was a concentration of fertility in the mothers aged 20s and early 30s. Third, on the other hand, in Central Java economic well-being appears to be connected with a high fertility rate, and general education has minimal effect, if any, on reducing fertility. In this respect it is not too hazardous to argue that the recent decline of fertility is partly attributed to the pressing economic pressure on the lowest income-group.

A.1.5   Geographical Difference of Fertility Rate

A.011   Geographical distribution of fertility rate is to be seen in Figure A.1. The data providing information on total fertility rates, their change during the 1960s, and age-specific fertility rates for every kabupaten and kotamadya are presented in Table A.7.

A.012   Geographical variation of fertility rate is not great: out of the 29 kabupatens, 24 kabupatens fall in the range of 10 percent above and below the Provincial average; kotamadyas have the value 93 at most and 73 at least if the Provincial average is taken as 100. Further, the geographical distribution of fertility rate gives an interesting picture. There are three areas in the Province having fertility rates that are more than 10 percent points higher than the Provincial average, namely Temanggung, Kebumen, and Brebes. It is noteworthy that out of the three, Temanggung and Brebes reached this high level of fertility after the steady increase in 1960s. Connecting these with other high level kabupatens Kendal, Wonosobo, Purworejo, Purwokerto, Cilacap, and Tegal, one could draw a half circle in the West of the Province. On the other hand, there is another corridor of high fertility rate in the northeast of the Province, comprising kabupatens Jepara, Demak, Purwodadi, and Grobogan. These kabupatens maintained relatively high fertility rates throughout the 1960s.

A.2   Mortality

A.2.1   General

A.013   Little is known about the mortality-rate for Central Java, or, for that matter for the entire nation. Some estimates have been made, however, of infant mortality rates using the Census and sample survey data. Table A.8 and Table A.9 give some of the results. The rate of mortality of children-ever-born until the age of exactly 1, based on the 1971 Census are presented in Table A.8. In the whole Province of Central Java about 16 percent of newborn males and 13 percent of newborn females die before they attain the age of one year

Figure A.1 Index of Total Fertility Rate[1]/ and Its Change in 1960s[2]/

J A V A   S E A

Rembang
90
GR: 95

Blora
96
GR: 93

Pati
96
GR: 93

Kudus
95
GR: 101

Jepara
102
GR: 100

Demak
110
GR: 98

Grobogan
110
GR: 101

KDY Salatiga
82
GR: 98

Sragen
104
GR: 93

KDY Surakarta
87
GR: 98

Karanganyar
94
GR: 82

KDY Magelang
93
GR: 112

Sukoharjo
100
GR: 90

Wonogiri
100
GR: 91

Boyolali
100
GR: 85

Klaten
98
GR: 87

Semarang
97
GR: 94

KDY Semarang
79
GR: 100

Magelang
96
GR: 106

Kendal
103
GR: 108

Temanggung
112
GR: 116

Wonosobo
106
GR: 102

Purworejo
107
GR: 97

KDY Pekalongan
73
GR: 102

Batang
87
GR: 113

Pekalongan
73
GR: 109

Banjarnegara
88
GR: 94

Kebumen
117
GR: 102

KDY Tegal
87
GR: 109

Pemalang
100
GR: 110

Purbalingga
92
GR: 107

Tegal
105
GR: 114

Banyumas
106
GR: 101

Brebes
113
GR: 118

Cilacap
106
GR: 100

I N D O N E S I A N   O C E A N

A-9

Legend

T.F.R. Less Than 5,270 (Index Less Than 100)

T.F.R. 5,271-5,797 (Index 101-110)

T.F.R. More Than 5,797 (Index More Than 110)

GR: Change in 1960s

106: T.F.R. (Total Fertility Rate)

Notes: 1/ Index of total fertility rate as
the average for the Province equals 100.
2/ Index of 1967-70 fertility rate as that for 1961-63 is 100.

Source: Table A.7.

0 10 20   50
                  km

Table A.7   Total and Specific Fertility Rates by Kabupaten/Kotamadya (Central Java, 1961 - 1970)

		Total Fertility Rate[1]		Change in T.F.R.		Age Specific Fertility Rate[2]						
		Total	Index (C.J.=100)	1964-66 (1961-63=100)	1967-70	15-19	20-24	25-29	30-34	35-39	40-44	45-49
1.	KDY Magelang	4,925	(93)	116	112	49	274	257	216	150	39	3
2.	KDY Surakarta	4,580	(87)	102	98	103	227	277	173	97	39	10
3.	KDY Salatiga	4,330	(82)	101	98	55	202	239	203	136	31	11
4.	KDY Semarang	4,205	(79)	104	100	79	213	241	175	98	35	5
5.	KDY Pekalongan	3,835	(73)	111	102	95	191	207	157	79	38	6
6.	KDY Tegal	4,580	(87)	96	109	103	227	277	173	97	39	10
7.	KB Cilacap	5,610	(106)	115	100	193	317	272	189	104	47	12
8.	KB Banyumas	5,630	(106)	105	101	149	287	289	220	134	47	12
9.	KB Purbalingga	4,860	(92)	120	107	141	272	233	172	109	45	13
10.	KB Banjarnegara	4,650	(88)	113	94	136	244	228	166	111	45	12
11.	KB Kebumen	6,190	(117)	104	102	144	333	316	235	143	67	11
12.	KB Purworejo	5,665	(107)	111	97	119	302	288	226	131	67	16
13.	KB Wonosobo	5,565	(106)	103	102	135	287	286	216	142	47	4
14.	KB Magelang	5,060	(96)	110	106	113	266	275	192	109	57	16
15.	KB Boyolali	5,250	(100)	87	85	87	282	268	217	133	63	13
16.	KB Klaten	5,155	(98)	96	87	91	284	282	193	122	59	15
17.	KB Sukoharjo	5,295	(100)	102	90	120	298	264	215	111	51	7
18.	KB Wonogiri	5,215	(100)	101	91	150	281	256	185	112	59	17
19.	KB Karanganyar	4,955	(94)	85	82	132	278	239	179	105	58	20
20.	KB Sragen	5,490	(104)	97	93	140	299	278	209	132	40	9
21.	KB Grobogan	5,775	(110)	104	101	180	306	286	211	125	47	15
22.	KB Blora	5,050	(96)	96	93	184	269	229	180	104	44	7
23.	KB Rembang	4,755	(90)	107	95	147	267	238	173	92	34	13
24.	KB Pati	5,060	(96)	104	93	176	273	245	177	115	26	6
25.	KB Kudus	5,025	(95)	103	101	153	279	257	185	97	34	9
26.	KB Jepara	5,350	(102)	115	100	184	280	248	215	99	44	14
27.	KB Demak	5,780	(110)	99	98	196	316	290	189	131	44	5
28.	KB Semarang	5,120	(97)	96	94	123	282	263	211	103	42	7
29.	KB Temanggung	5,900	(112)	119	116	145	330	309	224	119	53	9
30.	KB Kendal	5,415	(103)	107	108	160	269	273	214	122	45	13
31.	KB Batang	4,610	(87)	120	113	140	251	223	173	95	40	12
32.	KB Pekalongan	3,835	(73)	114	109	95	191	207	157	79	38	6
33.	KB Pemalang	5,270	(100)	116	110	160	286	259	201	112	36	14
34.	KB Tegal	5,535	(105)	113	114	175	292	269	213	120	38	12
35.	KB Brebes	5,560	(106)	113	118	182	297	272	213	110	38	13
	Central Java	5,270	(100)	105	99	144	284	265	199	115	47	12

Notes: 1/ Definition is the same as in Table A.2.
        2/ Definition is the same as in Table A.3.

Source: BPS 1976, op. cit.

Table A.8   Estimates of Infant Mortality Rates and

Implied Expectation of Life at Birth,

From 1971 Census

	Infant Mortality Rate[1] Until 1 Year Old (1qo) (No Death=1)		Life Expectancy[2] (eqo) (Years)	
	Male	Female	Male	Female
Central Java	0.1586	0.1345	44.04	47.00
Urban	0.1219	0.1030	50.01	53.00
Rural	0.1683	0.1432	42.60	45.50
East Java	0.1445	0.1221	46.27	49.25
West Java	0.1717	0.1461	42.12	45.00
Indonesia	0.1522	0.1281	45.00	48.00
Urban	0.1232	0.1034	49.79	52.75
Rural	0.1618	0.1374	43.56	46.50

Notes: 1/ The rate of mortality of children ever-born
until the exact age of 1. Based on 1971
Census.

2/ Life expectancy at birth.

Source: BPS, 1976, op. cit.

old. Figures for both are slightly higher than the national average, and also are between the averages of East Java and West Java. Here again the urban-rural difference is enormous. In the rural area the mortality rates are higher than those in the urban area by 38 percent age points for males and 39 percent age points for female respectively. Life expectancy at birth (the age of 0) implied by the infant mortality rates is in the right side of the table. The tendency observed here is the same as that from the infant mortality rates. Babies born in 1971 are expected to live an average of 44.04 years for males and 47.00 years for females, and the figures are slightly lower than the national average and about at the midpoint between the averages for East Java and West Java.

A.2.2 Trend in Mortality Rate

A.014   The trend of mortality rate over time is found in another estimate, part of which is presented in Table A.9. What is observed in the table is the very sharp decline in the period between 1945 to 1949 and 1950 to 1954; the rates of decrease are 33 percent for urban Central Java and 28 percent for rural Central Java, for the interval of only 5 years. Later than this period the rate of decline appears to be becoming less and less. It is also seen in the table that for each of the urban and rural areas the figures of Central Java remains at the midpoint of those for West Java and East Java: in the Island of Java, there are progressively lower infant mortality rates toward the east.

Table A.9   Estimates of Mortality Rate Until Exact Age of 5, by Birth Year Cohorts

	Year of Birth of Child				
	1945-49	1950-54	1955-59	1960-64	1965-67
Urban Central Java[1]/	253	171	161	126	117
Urban East Java	228	168	137	120	108
Urban West Java	269	216	180	161	136
Rural Central Java[1]/	301	218	178	164	157
Rural East Java	261	231	192	143	117
Rural West Java	282	271	245	217	188

Note: 1/ includes D.I. Yogyakarta.

Source: PM. McDonald, M. Yashin and G.W. Jones, Levels and Trends in Fertility and Childhood Mortality in Indonesia, Jakarta, 1976.

A.3 Mobility of the Population From and to the Province

A.3.1 General

A.015   It is widely recognized that there has been a massive movement of population from Central Java to the other areas in Indonesia. For the decade of 1961 to 1971, it is roughly estimated that the natural growth rate (birth rate minus death rate, indicating the growth rate of the population when no social mobility exists) was 2.1 percent, while the real growth rate between the two censuses in 1961 and 1971 was 1.7 percent. The difference of the two figures, 0.4, is considered to account for the net movement of the population towards the outside. Hence, in terms of the absolute amount, it implies that on the average around 80 thousands people per year left the Province. However, so far no work has been undertaken scrutinizing the absolute number of migrants from Central Java, its change over time, and characteristics of the migrants and their destination. The only survey giving information relevant to this point is the 1971 Census which included several questions concerning people's previous residence and birthplace. The resulting tabulations are published for each of 26 provinces and special regions as E series of the 1971 Census publications. The Study team elaborated on these data using the population that fall in the categories of born or previously lived in Central Java from each of the Province's table. The figures obtained are tabulated in several forms and for the following discussion we rely on this as virtually the only source of reliable data. Part of the result of the tabulation is presented in the left half of Table A.10, showing how much of the population born in Central Java now lives in all of the other provinces but four provinces⁻¹/ There were about 1,782 million people whose birthplace is in Central Java and presently living in elsewhere after migration in 1971. Out of these, about half (48.9 percent) are living in other provinces in Java and Madura, and the other half (49.2 percent) have settled down in the provinces in Sumatra; those who went to outer islands other than Sumatra are negligible in number. As a single province Jakarta is by far the most popular destination, being inhabited by about 500 thousands Central-Javanese which account for 28.1 percent of the total migrants. Presented in the right half of the table are the numbers of people who were born in other provinces and presently live in Central Java as of 1971. There were about 260 thousands of immigrants from the other provinces. The figure is around one-fifth of the Central Java born population presently living in elsewhere in the nation, and the configuration by provinces is also much different. It is striking that Java and Madura, especially West Java and East Java the two neighboring provinces, are the major origins of the immigrants to Central Java, the share for

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1/ The excluded four provinces are Kalimantan Tengah, Maluku, Irian Jaya and Nusatenggara Timur. This is due to data problems. This possibly will not cause serious biases in resulting figures since out-migration into these provinces are considered to be very small relative to others.

Table A.10   Mobility of Population Into and From Central Java, 1971

	Born in Central Java and Living Elsewhere		Born Elsewhere and Living in Central Java	
	(Persons)	(Percent)	(Persons)	(Percent)
DKI Jakarta	500,689	28.1	21,630	8.3
West Java	186,329	10.4	61,090	23.5
DI Yogyakarta	57,387	3.2	51,510	19.8
East Java	126,904	7.1	65,533	25.2
Java & Madura	871,309	48.9	199,763	76.7
Sumatra	875,976	49.2	30,761	11.8
Other Outer Islands	34,465[1/]	1.9	29,784[2/]	11.4
Total	1,781,750	100.0	260,308	100.0

Notes: 1/ Excludes Kalimantan Tengah, Maluku, Irian Jaya, and Nusa
          Tenggara Timur.

       2/ Includes foreign countries.

Source: Table A.12 and Table A.16.

each being a quarter of the total. The roles of Jakarta and Sumatra, which are the major destination of the emigration from Central Java, in contrast appear to be limited to around 10 percent. Reading across, the table indicates that the exchanges of the population with Yogyakarta and with outer islands other than Sumatra are almost even, whereas the migrants to Jakarta from the Province are almost 23 times greater than those moving in the opposite direction, and those to Sumatra are 29 times greater than the other way around.

A.016   In the following discussion migration from, and migration to, Central Java are given further scrutiny.

A.3.2   Out-Migration From Central Java

A.017   Table A.11 provides the summaries of the two measures of out-migration from Central Java. As stated before, the 1971 Census gives clues to the evaluation of the magnitude of immigration to each of the provinces mainly through providing the tabulations of numbers of immigrants classified by place of birth and by previous residence. In order to get estimates for the migrants from Central Java, the figures that accounts for the movement from Central Java were collected from each of the provinces' volume of the 1971 Census tabulation, and reorganized. The results of this exercises are summarized in Table A.12 and Table A.13, and much simplified in Table A.11. Some theoretical considerations will be helpful before examining the table. The basic question is, what makes the number of those who were born in Central Java and presently living in other provinces different from the number of those who had lived in Central Java before having moved to the present residence which is not in Central Java? The following figure gives a basic picture of the components of these flows.

Figure A.2   Movement From Central Java to Province X
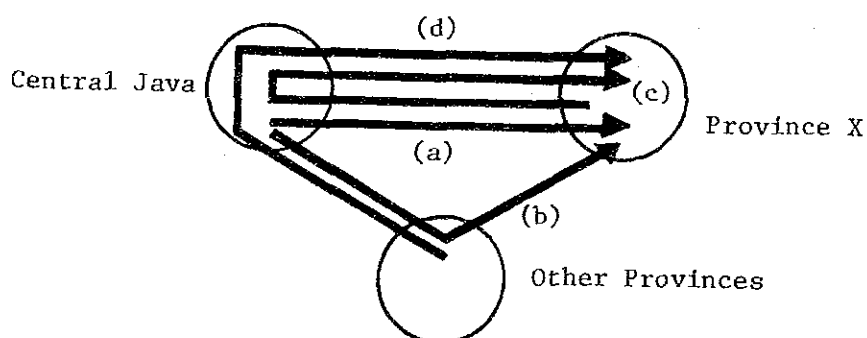
Table A.11   Outward Movement From Central Java

	Born in Central Java and Living in Elsewhere				Previous Residents of Central Java and Living Elsewhere		
	Male	Female	Total	(Percent)	Male	Female	Total
DKI Jakarta	257,832	242,857	500,689	28.1	245,882	238,162	484,044
West Java	100,655	85,674	186,329	10.4	108,620	90,464	199,089
DI Yogyakarta	31,259	26,128	57,387	3.2	36,219	30,070	66,289
East Java	71,800	55,104	126,904	7.1	73,428	58,300	131,728
Java and Madura	461,546	409,763	871,309	48.9	464,149	417,001	881,150
Sumatra	462,888	413,088	875,976	49.2	442,871	399,513	842,384
Other Outer Islands[1]	19,085	15,376	34,465	1.9	23,259	15,643	38,902
Total	943,523	838,227	1,781,750	100.0	930,279	832,157	1,762,436
Percent	53.0	47.0	100.0				

Note: 1/ Outer islands excluding Kalimantan Tengah, Maluku, Irian Jaya, and Nusa Tenggara Timur.

Source: Table A.12 and Table A.13.

Table A.12   Population Born in Central Java and Living in Other Provinces by Destination and Urban/Rural Nature of Present Residence

	Male			Female				
	Urban	Rural	Urban & Rural	Urban	Rural	Urban & Rural	Total	(Percent)
D.K.I. Jakarta	257,832	0	257,832	242,857	0	242,857	500,689	28.1
Jawa Barat	40,376	60,279	100,655	36,347	49,327	85,674	186,329	10.4
D.I. Yogyakarta	24,701	6,558	31,259	19,658	6,470	26,128	57,387	3.2
Jawa Timur	39,224	32,576	71,800	31,665	23,439	55,104	126,904	7.1
Jawa & Madura	302,133	99,413	461,546	330,527	79,236	409,763	871,309	48.9
D.I. Aceh	1,322	4,734	6,056	1,262	4,142	5,404	11,460	0.6
Sum. Utara	7,602	144,766	152,368	7,666	132,506	140,172	292,540	16.4
Sum. Barat	3,913	2,911	6,824	2,636	2,495	5,131	11,955	0.7
Riau	3,935	9,927	13,862	3,138	6,514	9,652	23,514	1.3
Jambi	5,182	11,789	16,971	3,612	8,129	11,741	28,712	1.6
Su. Selatan	20,093	43,394	63,487	17,374	36,837	54,211	117,698	6.6
Bengkulu	416	2,381	2,797	428	1,998	2,426	5,223	0.2
Lampung	10,566	189,951	200,523	10,151	174,200	184,351	384,874	21.6
Sumatra	53,029	409,859	462,888	46,267	366,821	413,088	875,976	49.1
Kal. Barat	1,266	641	1,907	955	0	955	2,862	0.2
Kal. Tengah	-	-	-	-	-	-	-	-
Kal. Selatan	3,290	3,723	7,013	2,577	3,625	6,202	13,215	0.2
Kal. Timur	1,015	517	1,532	1,166	128	1,294	2,826	-
Kalimantan	5,571	4,881	10,452	4,698	3,753	8,451	18,903	1.1
Sulawesi Utara	941	839	1,780	942	926	1,868	3,648	0.2
Sulawesi Tengah	161	141	302	122	110	232	534	-
Sulawesi Selatan	2,066	2,120	4,186	1,560	1,644	3,204	7,390	0.4
Sulawesi Tenggara	51	301	352	43	75	118	470	-
Sulawesi	3,219	3,401	6,620	2,667	2,755	5,422	12,042	0.7
Bali	982	239	1,221	670	191	861	2,082	0.1
Nusatengg. Barat	633	163	796	492	150	642	1,438	-
Nusatengg. Timur	-	-	-	-	-	-	-	-
Bali & Nusatenggara	1,615	402	2,017	1,162	342	1,503	3,520	0.2
Outer Islands	63,934	418,543	481,977	54,794	373,670	428,464	910,441	51.1
Indonesia	425,567	517,956	943,523	385,321	452,906	838,227	1,781,750	100.0
Percent	23.9	29.1	53.0	21.6	25.4	47.0	100.0	100.0

Souce: Study team's tabulation from 1971 Population Census, Seri E. No. 1 - No. 26.

Tabel A.13   Population Born in Central Java and Living in Other Provinces by Destination

and Duration of Stay in Those Provinces

	0 Year	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years	10 Years & More	Not Stated	Total
Jawa Tengah	na	na	na	na	na	na	na	na	na	na	na	na	na
D.K.I Jakarta	20,843	34,911	37,876	36,000	28,899	31,828	26,656	25,181	22,282	16,878	194,159	8,531	484,044
Jawa Barat	6,856	11,561	10,105	9,632	6,901	9,303	8,402	6,122	5,644	4,441	109,273	10,849	199,089
D.I. Yogyakarta	3,742	7,442	5,768	6,354	3,260	3,177	2,116	3,322	1,980	1,098	26,801	1,229	66,289
Jawa Timur	2,704	8,352	8,691	6,563	5,640	6,066	4,561	3,672	4,455	4,273	67,944	8,807	131,728
Jawa & Madura	34,145	62,266	62,440	58,549	44,700	50,374	41,735	38,297	34,361	26,690	398,177	29,416	881,150
D.I. Aceh	140	989	218	87	65	435	295	375	389	892	5,503	535	9,923
Sum. Utara	396	2,397	16,989	3,284	2,193	6,922	11,035	22,170	14,129	16,109	168,923	20,060	284,607
Sum. Barat	409	508	564	904	498	898	275	350	415	184	6,557	310	11,872
Riau	501	529	869	448	461	741	1,239	1,209	1,419	802	6,557	529	19,231
Jambi	214	908	1,969	1,821	1,032	1,374	1,695	1,372	1,307	691	13,161	1,830	27,374
Su. Selatan	1,610	3,573	4,000	3,461	3,198	5,015	10,153	5,954	2,742	2,133	68,722	3,007	113,568
Bengkulu	85	91	340	242	101	329	132	119	238	556	2,573	129	4,935
Lampung	3,898	11,910	11,749	15,238	14,457	20,372	30,928	29,710	27,216	18,400	167,458	19,538	370,874
Sumatra	7,253	20,905	36,698	25,485	22,005	36,086	55,752	61,259	47,855	39,767	443,381	45,938	842,384
Outer Islands	8,072	26,196	37,874	27,089	23,365	37,947	56,614	62,569	49,221	42,128	462,999	47,212	881,286
Indonesia	4,247	88,462	100,314	85,638	68,065	88,321	98,349	100,866	83,582	68,818	811,176	76,628	1,762,435

Note: na indicates "not applicable".

Source: Study team's tabulation from 1971 Population Census, Seri E. No.1 - No.26.

As seen in the figure those who are considered in the table as residents of Province X as born in Central Java include (a) migrants who went directly to Province X from Central Java; and (b) those who once migrated to the third province and then moved into Province X and settled there. In contrast those who are classified as "Previous Residents in Central Java" include (a) migrants who directly went to Province X from Central Java; (c) those who were born in Province X and once lived in Central Java before coming back to their homeland; and (d) those who moved into Province X from the third Province via Central Java. The difference of the two derives from relative size of (b) to (c) and (d). As seen in the table the total number of both are balanced if all the provinces are totaled. There were 1,782 thousands of Central Java-born and 1,762 thousands of Previous Residents in Central Java, the margin between them being around 1 percent for each. But for each specific destination there appear more conspicuous differences. For Jakarta, Previous Residents in Central Java are slightly outnumbered by the other, showing a sign of the existence of relatively large population who move first to other provinces and then eventually settled in Jakarta. The same inference applies to Sumatra. On the other hand, the opposite appears to be the case with the provinces in Java other than Jakarta and the outer islands other than Sumatra; those who once came to Central Java and went to the provinces excluding Sumatra and Jakarta, whichever their birth places are, exceed in number those who moved in the provinces excluding Sumatra and Jakarta from Central Java via other provinces although the margin is considerably small.

A.3.3 Annual Outflow of the Population

A.018   How many people move out of Central Java every year is not easy to assess. Some clue to the problems is to be given in Table A.14 where the Previous Residents in Central Java are cross-tabulated by the duration of inhabitation in the present residence. From the table it is known that the yearly movement from the province has rarely declined below 80 thousands or amounted to more than several thousands in recent years.

A.019   A striking finding from the data in the table is that the total does not show a distinct increase in number as the duration lessens, although it fluctuates considerably; those who have lived in other provinces for seven years after moving from Central Java (about 101 thousands) equal in number those whose duration of present residence is two years (about 100 thousands). Taking into account the fact that a substantial part of the population which moved from Central Java again migrate to the other provinces, so that the number of Previous Residents in Central Java should definitely increase as the duration in present residence decreases if a constant number is moving out from Central Java over time, the figures presented in the table may be taken as grounds for a hypothesis that the out-migration was decreasing in number through 1960s.

Table A.14 Migrants [1]/ From Central Java by Duration in Present Residence

	Years of Stay in Present Residence												
	0 Year	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years	10 Years & More	Not Stated	Total
Male													
D.K.I. Jakarta	8,713	16,504	18,830	17,501	14,932	16,267	13,466	13,220	11,440	8,923	101,562	4,524	245,882
Other Java	7,636	15,184	14,486	12,656	8,445	10,250	8,025	6,862	7,018	5,805	109,990	11,910	218,267
Sumatra	3,960	11,335	19,243	13,347	12,186	19,625	28,981	33,260	24,396	20,818	232,207	23,513	442,871
Other Outer Islands	484	2,585	646	1,020	707	1,292	512	821	942	1,880	11,704	666	23,279
Total	20,793	45,608	53,205	44,524	36,270	47,434	50,993	54,163	43,796	37,426	455,463	40,613	930,2 9
Female													
D.K.I. Jakarta	12,130	18,407	19,046	18,499	13,967	15,561	13,190	11,961	10,842	7,955	92,597	4,007	238,162
Other Java	5,666	12,171	10,078	9,893	7,356	8,296	7,054	7,373	5,061	4,007	94,028	8,975	179,958
Sumatra	3,293	9,570	17,455	12,138	9,819	16,461	26,771	27,999	23,459	18,949	211,174	22,425	399,513
Other Outer Islands	335	2,706	530	584	653	569	350	489	424	481	7,914	608	15,643
Total	21,424	42,854	47,109	41,114	31,795	40,887	47,365	47,822	39,786	31,392	405,713	36,015	833,276
Total													
D.K.I. Jakarta	20,843	34,911	37,876	36,000	28,899	31,828	26,656	25,181	22,282	16,878	194,159	8,531	484,044
Other Java	13,302	27,355	24,564	22,549	15,801	18,546	15,079	13,166	12,079	9,812	204,018	20,885	397,106
Sumatra	7,253	20,905	36,698	25,485	22,005	36,086	55,752	61,259	47,885	39,767	443,381	45,938	842,384
Other Outer Islands	819	5,291	1,176	1,604	1,360	1,861	862	1,310	1,366	2,361	19,618	1,274	38,902
Total	42,217	88,462	100,314	85,638	68,065	88,321	98,344	100,866	83,582	68,818	861,176	76,628	1,762,436

Note: 1/ For Definition, see the text.

Source: Table A.13.

A.020   The trend is different with destinations, however. Quite
outstanding is the fact that the figures for Jakarta are much higher
in the brackets of short durations than those in long durations: those
whose stay in Jakarta lasts 1 to 3 years are on the average 35
thousands, while those living in Jakarta for 7 to 9 years are on the
average 21 thousands. This implies the existence of substantial
secondary movements from Central Java to Jakarta. Since it was
observed in the previous discussion that the secondary movement from
Jakarta is not significant relative to the other components, it is
not too hazardous to state that the movement to Jakarta is likely to
have increased in the 1960s. By the same token the movement toward
parts of Java Island other than Jakarta appears to be remaining
steady. In contrast, the Previous Residents in Central Java is in
fact decreasing as the duration of residence becomes short; the average
for duration of 1 to 3 years is around 28 thousand persons, while
that for 7 to 9 years amounts 50 thousand persons. The message
here is quite clear: at least the direct movement towards Sumatra
from Central Java declined significantly throughout the 1960s.
This over-all pattern is not considered to vary by sex.

A.021   In conclusion, the movement from Central Java did not
increase during the decade of 1960s, the reason being the decreasing
movement towards Sumatra, which well outwighs the increasing numbers,
of movement towards Jakarta and other provinces in Java. In the late
1960s the number of direct movement from Central Java is estimated
at somewhere in-between 80 thousands and 100 thousands.

A.3.4   Transmigration Into Central Java

A.022   The population-flow into Central Java is not insignificant.
The number of persons in Central Java who were born in other provinces
and "Previous Residents in Other Provinces" are presented in Table
A.16 and Tabel A.17. Excerpts from the tables are illustrated in
Table A.15. Before examining the statistics again an exercise in
simple arithmetics will help in comprehending what is hidden behind
the figures:

Figure A.3   Movement From Province X to Central Java
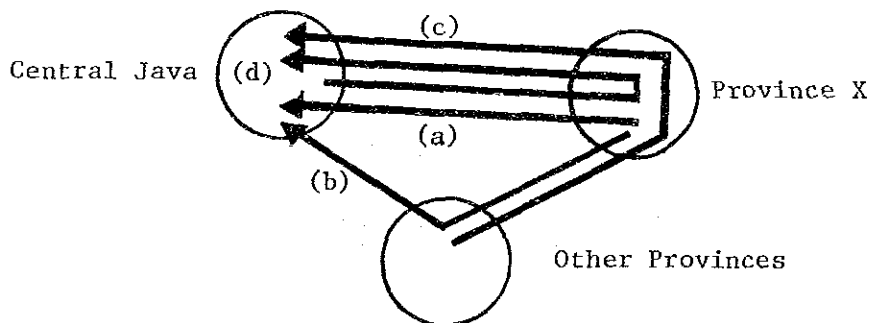
Table A.15   Population Born and Previously Living in Other

Provinces and Now Living in Central Java

	Born in Other Provinces (1)	Previous Residents in Other Provinces (2)	(2) – (1)
D.K.I. Jakarta	21,630	102,064	80,434
East Java	61,090	126,967	65,877
D.I. Yogyakarta	51,510	68,024	16,514
West Java	65,533	98,280	32,747
Java and Madura	199,763	395,335	195,572
Sumatra	30,761	143,730	112,969
Other Outer Islands	22,963	55,835	32,882
Total	253,477	594,900	341,423

Source: Tables A.16 and A.17.

A-22

	Male			Female			Male & Female		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Jawa Tengah	na	na	na	na	na	na	na	na	na
D.K.I. Jakarta	4,534	6,304	10,838	5,012	5,780	10,792	9,546	12,084	21,630
Jawa Barat	11,342	21,828	33,170	9,870	18,050	27,920	21,212	39,878	61,090
D.I. Yogyakarta	12,482	12,095	24,577	14,032	12,901	26,933	26,514	24,996	51,510
Jawa Timur	18,039	13,383	31,422	21,217	12,894	34,111	39,256	26,277	65,533
Jawa & Madura	46,397	53,610	100,007	50,131	49,625	99,756	96,528	103,235	199,763
D.I. Aceh	530	504	1,034	467	669	1,136	997	1,173	2,170
Sum. Utara	1,799	3,382	5,181	1,251	3,499	4,750	3,050	6,881	9,931
Sum. Barat	1,346	768	2,114	1,276	656	1,932	2,622	1,424	4,046
Riau	280	788	1,068	349	105	454	629	893	1,522
Jambi	135	515	650	137	454	591	272	969	1,241
Su. Selatan	1,719	3,019	4,738	1,820	2,459	4,279	3,539	5,478	9,017
Bengkulu	53	53	106	124	53	177	177	106	283
Lampung	344	1,141	1,485	241	825	1,066	585	1,966	2,551
Sumatra	6,206	10,170	16,376	4,665	8,720	14,385	11,871	18,890	30,761
Kal. Barat	384	749	1,133	397	730	1,127	781	1,479	2,260
Kal. Tengah	135	56	191	195	109	304	330	165	495
Kal. Selatan	1,766	333	2,099	1,001	377	1,378	2,767	710	3,477
Kal. Timur	776	478	1,254	653	455	1,108	1,429	933	2,362
Kalimantan	3,061	1,616	4,677	2,246	1,671	3,917	5,307	3,287	8,594
Sulawesi Utara	261	458	719	361	117	478	622	575	1,197
Sulawesi Tengah	119	265	384	104	162	266	223	427	650
Sulawesi Selatan	1,788	972	2,760	1,521	937	2,458	3,309	1,909	5,218
Sulawesi Tenggara	185	157	342	245	3	248	430	160	590
Sulawesi	2,353	1,852	4,205	2,231	1,219	3,450	4,584	3,071	7,655
Maluku	448	393	841	332	256	588	780	649	1,429
Irian Jaya	328	263	591	131	259	390	459	522	981
Maluku & Irian Jaya	776	656	1,432	463	515	978	1,239	1,171	2,410
Bali	598	570	1,168	887	212	1,099	1,485	782	2,267
Nusatengg. Barat	525	56	581	248	1	249	773	57	830
Nusatengg. Timur	493	220	713	385	99	484	878	319	1,197
Bali & Nusatenggara	1,616	846	2,462	1,520	312	1,832	3,136	1,158	4,294
Outer Islands	14,012	15,140	29,152	11,125	12,437	24,562	26,137	27,577	53,714
Foreign Country	3,821	501	4,322	2,314	195	2,509	6,135	696	6,831
Indonesia	60,409	68,750	129,159	61,256	62,062	124,318	122,665	130,812	253,477

Note: na indicates "not applicable".

Source: 1971 Population Census, Seri E. No.11.

Table A.17   Movement Into Central Java and Implied Number of Return

	Urban Central Java			Rural Central Java			Urban & Rural Central Java		
	Birthplace	Previous Residence	Return	Birthplace	Previous Residence	Return	Total of Birthplace	Previous Residence	Return
	(1)	(2)	(2)-(1)	(3)	(4)	(4)-(3)	(5)	(6)	(6)-(5)
D.K.I. Jakarta	9,546	32,419	22,873	12,084	69,645	57,561	21,630	102,064	80,434
Jawa Barat	21,212	37,250	16,038	39,878	89,717	49,839	61,090	126,967	65,877
D.I. Yogyakarta	26,514	34,756	8,242	24,996	33,268	8,272	51,510	68,024	16,514
Jawa Timur	39,256	51,145	11,889	26,277	47,135	20,858	65,533	98,280	32,747
Jawa & Madura	96,528	155,570	59,042	103,235	239,765	136,530	199,763	395,335	195,572
D.I. Aceh	997	2,433	1,436	1,173	6,454	5,281	2,170	8,887	6,717
Sum. Utara	3,050	5,109	2,059	6,881	29,397	22,516	9,931	34,506	24,575
Sum. Barat	2,622	4,508	1,886	1,424	8,724	7,300	4,046	13,232	9,186
Riau	629	1,847	1,218	893	8,292	7,399	1,522	10,139	8,617
Jambi	272	916	644	969	11,267	10,298	1,241	12,183	10,942
Su. Selatan	3,539	7,842	4,303	5,478	36,097	30,619	9,017	43,939	34,922
Bengkulu	177	485	308	106	1,695	1,589	283	2,180	1,897
Lampubg	585	1,952	1,367	1,966	16,712	14,746	2,551	18,664	16,113
Sumatra	11,871	25,092	13,221	18,890	118,638	99,748	30,761	143,730	112,969
Kal. Barat	781	2,702	1,921	1,479	3,604	2,125	2,260	6,306	4,046
Kal. Tengah	330	997	667	165	908	743	495	1,905	1,410
Kal. Selatan	2,767	4,750	1,983	710	3,927	3,217	3,477	8,677	5,200
Kal. Timur	1,429	2,898	1,469	933	2,620	1,687	2,362	5,518	3,156
Kalimantan	5,307	11,347	6,040	3,287	11,059	7,772	8,594	22,406	13,812
Sulawesi Utara	622	965	343	575	975	400	1,197	1,940	743
Sulawesi Tengah	223	437	214	427	1,322	895	650	1,759	1,109
Sulawesi Selatan	3,309	5,209	1,900	1,909	6,240	4,331	5,218	11,449	6,231
Sulawesi Tenggara	430	586	156	160	1,198	1,038	590	1,784	1,194
Sulawesi	4,584	7,197	2,613	3,071	9,735	6,664	7,655	16,932	9,277
Maluku	780	2,824	2,044	649	1,936	1,287	1,429	4,760	3,331
Irian Jaya	459	5,085	4,626	522	2,233	1,711	981	4,343	3,362
Maluku & Irian Jaya	1,239	7,909	6,670	1,171	4,169	2,998	2,410	9,103	6,693
Bali	1,485	2,025	540	782	1,482	700	2,267	3,507	1,240
Nusatengg. Barat	773	1,335	562	57	562	505	830	1,897	1,067
Nusatengg. Timur	878	1,048	162	319	950	631	1,197	1,990	793
Bali & Nusatenggara	3,136	4,400	1,264	1,158	2,994	1,836	4,294	7,394	3,100
Outer Islands	26,137	55,945	29,808	27,577	146,595	119,018	53,714	199,565	145,851
Indonesia	122,665	211,515	88,850	130,812	386,360	255,548	253,477	594,900	341,423

Source: Table A.16.

In the figure it is clarified that "Born in Other Provinces" classified as from "Province X" include those persons (a) who came directly to Central Java from the Province X; and (b) who came through another Province. Previous Residents in the Province X encompass those (a) who were born in Province X and came to Central Java directly; and (c) who were born in the third province and came to Central Java via Province X but came back to their homeland eventually; that is, the return-migrants. Consequently the difference between the two figures comes from the balance of (b) with (c) and (d). If the size of (b) and (c) are not likely to differ from each other the margin between Born in Other Provinces and Previous Residents in Other Provinces imply the size of (d), the return-migrants.

A.023   In fact Table A.15 indicates the existing margin of numbers for Born in Other Provinces and Previous Residents in Other Provinces. There were 253 thousands who were born in other provinces and living in Central Java in 1971, while those whose previous residence was outside Java were 595 thousands, more than the double of the former. If we assume the equivalent size of (b) and (c) as stated before we get a rough estimate of return-migrants by subtracting the former from the latter: the resulting figure is 341 thousands. In the right half of the Table A.15 the estimate is indicated for each origin. Evident in the table is the fact that although the return-migrants are distributed fairly evenly, those from Sumatra are far beyond the others in thrms of share in the total Previous Residents: out of some 144 thousands people who resided in Sumatra before coming to Central Java, as much as 113 thousands or 78 percent of it are considered to be once-migrants to Sumatra from the Province.

A.024   In conclusion, it is to be noted that, although the inflow of population to Central Java as measured by the number of people who used to live elsewhere amounts to be about one-third of the outflow, a substantial part of this inflow, about a half, is in fact the returning population.

A.3.5   Annual Inflow of the Population

A.025   The only available way to scan the trend of the inflow of the immigrants to Central Java is to investigate the tabulation of the Previous Residents in Other Provinces as cross-classified bv the duration of residence in Central Java. Table A.18 gives the resulting figures, and Table A.19 is its summarized form. The conspicuous fact evident from the table is that the number of migrants is increasing as the duration lessens. If the movement of the population going to other provinces via Central Java is not significantly large, the table implies that the return-migrants and the movements from the other provinces are likely to be increasing over time in the 1960s: there were at least 23 thousands who moved into Central Java, on the average, for a three-year period in the early 1960s (7 to 9 years before the 1971 Census:, whereas that for the end of the 1960s

Table A.18　Population Previously Living in Other Provinces and Presently Living in Central Java in 1971 by Duration of Residence

						Duration of Stay in Central Java								
	0 Year	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years	10 Years & More	Not Stated	Total
D.K.I. Jakarta	7,528	13,770	1,407	8,474	5,901	7,842	6,182	5,001	3,982	3,055	28,323	2,599	102,064
Jawa Barat	6,289	13,526	10,714	9,290	7,773	9,409	7,253	5,085	4,272	3,644	46,011	3,701	126,967
D.I. Yogyakarta	2,605	5,364	5,057	4,197	3,398	2,980	3,739	2,894	1,915	1,792	32,020	2,063	68,024
Jawa Timur	3,931	9,265	6,998	5,974	5,241	5,075	4,871	3,776	3,502	2,555	42,603	4,489	98,280
Jawa & Madura	20,353	41,925	32,176	27,935	22,313	25,306	22,045	16,756	13,671	11,046	148,957	12,852	395,335
D.I. Aceh	393	672	637	539	309	354	361	125	307	56	3,280	1,854	8,887
Sum. Utara	1,470	3,483	1,611	1,398	1,458	2,844	2,566	1,562	1,405	552	14,453	1,704	34,506
Sum. Barat	216	636	1,014	894	907	891	1,108	243	542	447	5,490	844	13,232
Riau	142	1,228	920	914	592	869	1,142	364	636	201	2,590	541	10,139
Jambi	472	808	1,009	244	665	916	461	874	758	443	4,181	1,355	12,183
Su. Selatan	975	4,315	3,314	3,466	3,736	3,306	3,361	2,019	2,795	1,909	13,639	1,104	43,939
Bengkulu	0	81	187	99	154	70	438	101	0	1	565	485	2,180
Lampung	482	2,100	1,455	1,306	1,741	1,578	1,151	1,287	1,227	692	4,840	805	18,664
Sumatra	4,150	13,323	10,107	8,860	9,562	10,828	10,588	6,575	7,670	4,301	49,038	8,047	143,730
Kal. Barat	72	396	399	414	377	395	835	315	140	339	2,538	86	6,306
Kal. Tengah	8	234	109	152	17	40	3	219	546	62	376	139	1,905
Kal. Selatan	241	749	242	614	495	277	704	545	605	264	3,636	305	8,677
Kal. Timur	148	238	401	521	117	204	631	440	38	23	2,358	399	5,518
Kalimantan	469	1,617	1,151	1,701	1,006	916	2,173	1,519	1,329	688	8,908	929	22,406
Sulawesi Utara	352	182	115	107	99	76	40	49	60	77	590	193	1,940
Sulawesi Tengah	2	321	27	94	96	118	71	222	18	4	680	106	1,759
Sulawesi Selatan	285	526	742	975	898	718	913	752	415	371	4,699	155	11,449
Sulawesi Tenggara	5	7	281	103	180	286	54	261	14	6	577	10	1,784
Sulawesi	1,113	1,036	1,165	1,279	1,273	1,198	1,078	1,284	507	458	6,546	464	16,932
Maluku	68	158	247	17	102	309	258	489	232	102	2,719	59	4,760
Irian Jaya	200	484	812	674	330	309	88	157	264	135	827	63	4,343
Maluku & Irian Jaya	268	642	1,059	691	432	618	346	646	496	237	3,546	122	9,103
Bali	68	274	225	194	439	224	522	111	355	25	986	84	3,507
Nusatengg. Barat	73	139	41	151	42	174	40	111	109	126	774	117	1,897
Nusatengg. Timur	81	160	37	124	186	457	62	109	142	51	520	61	1,990
Bali & Nusatenggara	222	573	303	469	667	855	624	331	606	202	2,280	262	7,394
Outer Islands	6,222	17,191	13,785	12,999	12,940	14,415	14,809	10,355	10,608	5,886	70,318	9,824	199,565
Abroad	251	70	137	251	200	51							
Indonesia	26,357	59,186	46,138	41,185	35,450	39,772	36,974	27,176	24,290	16,986	226,769	24,083	604,366

Source: 1971 Census, Seri E. No.11.

Table A.19   Migrants to Central Java, by Previous Residences

and Duration of Stay in Central Java

	0 Year	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years	10 Years & More	Not Stated	Total
D.K.I. Jakarta		13,770	9,407	8,474	5,901	7,842	6,182	5,001	3,982	3,055	28,323	2,559	102,064
West Java		13,526	10,714	9,290	7,773	9,409	7,253	5,085	4,272	3,644	46,011	3,701	126,967
D.I. Yogyakarta		5,364	5,057	4,197	3,398	2,980	3,739	2,894	1,915	1,792	32,020	2,063	68,024
East Java		9,265	6,998	5,974	5,241	5,075	4,871	3,776	3,502	2,555	42,603	4,489	98,280
Java & Madura		41,925	32,176	27,935	22,313	25,306	22,045	16,756	13,671	11,046	148,957	12,852	395,335
Sumatra		13,323	10,107	8,859	9,562	10,828	10,588	6,575	7,670	4,301	49,038	8,047	143,730
Other Outer Islands		3,868	3,678	4,140	3,378	3,587	4,221	3,780	2,938	1,585	21,280	1,777	55,835
Indonesia, Without Abroad		59,116	45,961	40,934	35,253	39,721	36,854	27,111	24,479	16,932	219,275	22,676	564,900

Source: Table A.18.

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(1 to 3 years before the Census), it is around 49 thousands. The rise
in number is quite impressive even considering the shrinkage of the
population due to the secondary movements towerds other provinces.
This trend appears to be shared with any of the provinces which
migrants are from.

A.026   In terms of absolute number it would not be risky to state
that the number of inflow of population into Central Java in the later
1960s is somewhere in between 40 thousands and 60 thousands.

A.3.6 Age Structure of Transmigrants

A.027   As the last aspect of the investigation of transmigrants
from and to Central Java, attributes of the migration population in
terms of age structure and educational attainment are examined in this
and the following sections.

A.028   Although what draws our attention is the age structure of
the migration population from year to year, we only have data on each
age category at the point of 1971. These data were prepared from the
1971 Census tabulation for each of the provinces, and its summary is
presented in Table A.20. The distribution of the migrants by age
appear to be smooth in shape with its peak in the age brackets of 10
to 14 to age 35 to 39 if all the destinations are taken. The share of
those below age 30 is 45.5 percent of the total migrants. Considering
that the age distribution of out-migrants observed in the Census is
biased upward from the age-distribution of out-migrants in each year
because of their aging after out-migration, the inference that a
considerable part of the migration every year are between age 15 and 29
does not appear to be completely arbitrary. Slight differences in age
distribution are observed by destination. While the peak of the four
distributions unanimously come at the age bracket of 25 to 29, Jakarta
is inhabited by more migrants of the younger generation; the percentage
in the brackets of age 15 to 19 to age 30 to 39 for Jakarta exceeds
their counterparts for any other three regions, rendering the percentage
of age below 40 for Jakarta as high as 80.2 percent, as contrasted with
62.1 and 64.7 percents for the other provinces in Java and Sumatra.
The factors possibly working behind this pattern are an inclination
among young migrants to go to Jakarta and/or continuous migration stream
since the relatively distant past to the provinces in the island of Java
but Jakarta, and to Sumatra. At least, it should be noted that Jakarta
has been accepting a considerably large population of young migrants
recently.

A.029   To sum up, the population migrating to the other provinces
consists of substantial number of members of the younger generation;
and this concentration in younger age group is more apparent with the
migrants to Jakarta.

Table A.20   Number of Persons and Percentage Share of Population Born in Central Java

and Living in Other Provinces in 1971 by Age

	Jakarta	Other Java	Sumatra	Other Islands	Total	Total (Percent)
Total Population	500,689	370,620	875,976	34,465	1,781,750	na
Age 0- 4	1.9	1.6	1.1	2.7	26,324	1.5
5- 9	3.8	3.2	4.8	4.3	74,187	4.2
10-14	6.2	4.5	7.1	5.2	111,727	6.3
15-19	12.4	9.9	7.7	7.7	169,718	9.5
20-24	15.8	10.8	7.5	9.3	188,438	10.6
25-29	16.6	11.5	12.3	14.0	238,945	13.4
30-34	13.2	10.4	12.3	12.8	217,376	12.2
35-39	10.3	10.2	11.9	11.3	197,118	11.1
40-44	7.1	9.0	8.4	8.9	146,018	8.2
45-49	4.4	7.4	6.4	8.1	108,895	6.1
50-54	3.1	6.8	6.7	5.0	101,572	5.7
55-59	1.6	4.3	3.7	2.7	57,710	3.2
60-64	1.1	4.7	4.0	2.6	58,848	3.3
65-69	0.6	2.0	2.2	1.3	30,037	1.7
70-74	0.4	2.0	2.2	2.5	29,397	1.6
75-	0.3	1.6	1.7	1.8	23,243	1.3
Total	100.0	100.0	100.0	100.0	na	100.0

Source: Study team's tabulation from 1971 Census, Seri E. No. 1 – No.26.

A.3.7 Educational Attainment of the Out-Migrants

A.030   Educational attainment of the migrants from Central Java is generally better than those who stay in the Province. The percentage distributions by educational attainment for male and female migrants are presented in Table A.21. The population having less than the primary school education accounts for 64 percent of the total migrations above age 10 from Central Java; this is a high figure but still considerably lower than the 80 percent average for the population living in Central Java. For the group with any level of education, the migrants maintain high figures relative to those who are staying: those with junior high school, senior high school, and higher education diploma are 8, 6, and 2 percent respectively among migrants, against 4, 2, and less than 1 percent among those who stay. Obviously, the large share of young generation, which is likely to possess better level of educational attainment, among the migrant population is one of the major reasons of the observed high educational attainment. Still it should be noted that the higher rate of migration is accompanied by higher educational attainment. Again the difference by the destination is remarkable in this aspect. In Jakarta the share of the migrants with less than the primary school education is 22 percent, and that for those with more than primary school education is 26 percent; for Sumatra the corresponding figures are 82 percent and 4 percent. This is for one thing the reflection of the younger age-composition of migrants in Jakarta, but that Jakarta is attracting people with relatively higher educated population, and that in contrast, Sumatra is the destination for those with minimal education is evident. Although the difference by sex is enormous, the pattern of that difference does not appear to differ from one destination to another.

Table A.21   Educational Attainment of Those Who Were Born in Central Java and Living in Other Provinces

in 1971 and Were 10 Years Old or More

	No School	Not Yet Finished Elementary School	Elementary School	Junior High General	Junior High Vocational	Senior High General	Senior High Vocational	Academy	University	Total
Male										
Jakarta	25,426	47,914	80,582	30,533	12,401	23,359	11,390	6,064	6,185	293,854
Other Java	41,616	38,350	51,085	21,728	8,679	16,156	8,202	4,848	3,527	194,191
Sumatra	154,727	169,175	89,441	10,887	5,325	3,214	2,943	905	778	437,385
Other Outer Islands	3,595	4,188	4,848	2,016	1,037	1,160	607	397	294	18,142
Total	225,364	259,627	225,956	65,154	27,442	43,889	23,142	12,214	10,784	893,572
Female										
Jakarta	74,605	50,827	57,652	18,710	6,088	11,055	6,069	1,633	1,820	228,409
Other Java	73,773	24,572	30,474	12,023	4,107	4,107	6,806	4,507	724	158,313
Sumatra	258,662	92,273	29,207	3,943	1,145	834	681	122	159	387,026
Other Outer Islands	5,736	3,029	3,179	1,023	2,498	423	309	12	10	16,220
Total	412,766	170,701	120,512	35,699	13,838	16,419	13,865	6,274	2,713	789,968
Total										
Jakarta	100,031	98,741	138,234	49,243	18,489	34,364	17,459	7,697	8,005	472,263
Other Java	115,389	62,922	81,559	33,751	12,786	22,962	12,709	6,175	4,251	352,504
Sumatra	413,389	261,448	118,648	14,820	6,470	4,048	3,624	1,027	937	824,411
Other Outer Islands	9,321	7,217	8,027	3,039	1,245	1,583	916	409	304	32,061
Total	638,130	430,328	346,468	100,853	38,990	62,957	34,708	15,308	13,497	1,681,239

Source: Study team's tabulation from 1971 Census, Seri E, No. 1 – No. 26.

APPENDIX B

FUTURE GROWTH OF THE POPULATION

APPENDIX B.

FUTURE GROWTH OF THE POPULATION

B.1   Future Growth of the Population

B.1.1   Assumptions for Population Projection

B.001   Based on the preceding analysis, an effort has been made
to project the future population growth for the Province until 1991.
The resulting figure shows that the Province again will see an increasing
population growth rate in the 1980s if the present conditions remain
the same. The projection is based on several assumptions the details
of which are in Table B.1.

B.002   In the first place, age-specific fertility rates for the
beginning of the 1970s were derived by extending the trend between the
1964 to 1966 average and the 1967 to 1970 average. The resulting total
fertility rate is 5,010 per 1,000 mothers, which is 5 percent lower
than the 1964 to 1966 average and 10 percent lower than the 1967 to
1970 average. This age-specific fertility rate is supposed to be biased
upward depending on the future decline of the fertility rate. However,
it should be noted that the decline of the fertility rate toward the
end of 1960s is not considerable, and probably in the beginning of
1970s as noted in the previous discussion. The number of births for
the projected period, led from this assumption, is presented in Table B.2.

B.003   The outmigration from the Province is assumed to amount to
40 thousand each year. Since it was estimated in Appendix A that the
gross outflow of the population is between 80 thousand and 100 thousand,
and that the gross inflow of the population is between 40 thousand and
60 thousand at the end of the 1960s, the net outflow of the population
should be 60 thousand at most and 20 thousand at least. Although the
trend of migration in the 1970s is not known, the trend observed in
the 1960s was that the out-migration was at least not increasing, and
that the inflow of the population was increasing. It is not likely
that the net outflow of the population has been increasing in the former
half of the 1970s if the trend in the 1960s is supposed to have continued.

Table B.1   Assumption for Population Projection

| | Fertility Rate | Net Movement From Central Java | | Mortality Rate (for 5 years) |
		Male	Female	
New Born	--	--	--	[2]/.050
0 - 4	0	466	414	[3]/.060
5 - 9	0	1,293	1,147	.030
10 - 14	0	1,929	1,711	.021
15 - 19	96	2,904	2,576	.021
20 - 24	284	3,244	2,876	.021
25 - 29	261	4,091	3,628	.021
30 - 34	191	3,731	3,309	.021
35 - 39	110	1,866	1,654	.054
40 - 44	48	912	808	.067
45 - 49	12	466	414	.087
50 - 54	0	222	132	.111
55 - 59	0	85	56	.146
60 - 64	0	0	0	.200
65 - 69	0	0	0	.291
70 - 74	0	0	0	.481
75 and More	0	0	0	1.000
Total	5,010[1]/	21,200	18,800	--

Notes: 1/   Total Fertility Rate

2/   Average of Oq1 and Oq4

3/   Average of Oq5 and 4q9.   The following figures follow this definition.

Source: Study Team.

Table B.2   Number of Births During Projected Period
Implied by the Assumptions

Age of Mother	Birth 1971 – 1975 Average	1976 – 1980	1981 – 1985	1986 – 1991
15 – 19	99,213	123,754	157,752	142,981
20 – 24	206,455	284,642	349,928	451,685
25 – 29	223,682	171,005	241,351	300,089
30 – 34	154,531	154,909	117,165	167,564
35 – 39	87,416	87,128	87,341	66,065
40 – 44	29,175	36,085	35,966	36,054
45 – 49	5,523	6,805	8,417	8,389
Gross Birth	805,995	862,328	997,920	1,172,827
Crude Birth Rate[1]/	3.686	3.626	3.930	4.128

Note: 1/ As percent of the projected population at the beginning of each four duration.

Source: Mission's calculation based on the assumption in Table B.1.

Hence the net outflow of the population from Central Java, in the projection, is to be constant, 40 thousand per year. This 40 thousand is further split into male and female by employing the sex-share of the migrated population, and distributed to the age brackets. It was concluded in the preceding discussion that the majority of the migrants are of the age 15 to 29, and while there should be migrants below and above this age strata -- especially as members of the transmigrating families -- the size of which is hard to assess due to lack of data on outmigrants and return-migrants. The only clue left to infer the age distribution is the comparision in percent distribution by age bracket between the whole nation and Central Java. Hence, the out-migration was distributed among the age bracket of age 15 to 19 to age 29 to 30 in proportion to the size of the population in those age brackets.[1] This assumption may appear somewhat unnatural especially with the 0 migrants in the younger age bracket, but a change of distribution to allow certain numbers of migrants to these bracket makes a negligible effect on the resulting estimate of the growth rate, since the only change is through the reduction of women in the repro-ductive age.

B.004   It was decided to keep the mortality rate at present pattern, and the infant mortality rate was taken as 150 for 1,000 births which is roughly the average at the start of the 1970s.[2] This level of mortality rate may tend to be over-estimated for 1970s, which may make the resulting projection of population growth slightly under-estimated.

B.1.2 *Projected Growth of the Population*

B.005   The projected future growth of the population, that emerges from the assumption mentioned above and the age structure of the population in Central Java, is summarized in Table B.3. The age-cohort method was used for the estimation and the outcome of the exercise is shown in Table B.4. If the factors are assumed to remain constant over time, the population of Central Java will be 25,853 thousand in 1981, 28,412 thousand in 1986, and will exceed the line of 30 million to amount to 31,511 thousand in 1991.[3] An increase of nearly 8 million population is expected within 15 years.

B.006   In terms of population growth it is a profound fact is that the rate would remain almost stable in the 1970s, but it will increase again in the 1980s to mark 1.902 percent for the 1981 to 1985 average and 2.093 percent for the 1986 to 1991 average. Admittedly the growth rate is very sensitive to the various assumptions, and the rates for the 1970s is a subject of error by plus or minus 15 percent. But it seems to be inevitable for Central Java to experience the increase in growth rate in the 1980s unless an extra-ordinary drop in fertility

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[1] See section 2.1.3 and Appendix A.3.
[2] See Appendix A.1.
[3] The projected figure for 1976 is different from the 1976 population estimated from population registration in Chapter II, although the margin is as small as 19 thousand. This occurs because the projec-tion is based on the 1971 Population Centus.

Table B.3   Projected Growth of Population 1971 - 1991

	1971	1976	1981	1986	1991
Population	21,865,263	23,784,581	25,857,696	28,411,700	31,511,437
Crude Birth Rate (%)	3.686	3.626	3.930	4.128	
Crude Death Rate (%)	1.806	1.773	1.873	1.894	
Natural Growth Rate (%)	1.880	1.853	2.057	2.234	
Net Social Mobility (%)	- 0.183	- 0.168	- 0.155	- 0.141	
Annual Growth Rate (%)	1.697	1.685	1.902	2.093	

Source: Table B.4.

Table B.4   Projected Future Population Growth until 1991
by Sex and Age Strata

		1971	1976	1981	1986	1991
Male						
Age	0 – 4	1,678,660	1,712,739	1,832,447	2,120,580	2,492,257
	5 –	1,756,803	1,577,940	1,609,975	1,722,500	1,933,345
	10 –	1,380,806	1,704,099	1,530,602	1,561,676	1,670,825
	15 –	1,027,192	1,351,809	1,668,313	1,498,459	1,528,880
	20 –	610,792	995,121	1,312,921	1,622,778	1,456,491
	25 –	626,544	534,465	910,723	1,221,850	1,525,200
	30 –	658,907	581,387	491,241	859,598	1,164,191
	35 –	734,582	645,070	569,109	480,925	841,546
	40 –	606,543	694,915	610,236	538,377	454,955
	45 –	481,133	565,905	648,356	569,350	502,305
	50 –	383,049	439,274	516,671	591,940	519,817
	55 –	242,467	340,531	390,515	459,321	526,243
	60 –	201,415	207,067	290,813	333,500	392,260
	65 –	105,304	161,132	165,654	232,650	266,800
	70 –	100,864	74,661	114,243	117,449	164,949
	75 More	71,780	52,348	38,749	59,292	60,956
	Total	10,666,901	11,638,463	12,700,568	13,990,254	15,561,020
Female						
Age	0 – 4	1,668,501	1,712,739	1,832,447	2,120,580	2,492,257
	5 –	1,730,421	1,568,391	1,609,975	1,722,500	1,993,345
	10 –	1,295,481	1,678,508	1,521,339	1,561,676	1,670,825
	15 –	1,033,466	1,268,276	1,643,259	1,489,390	1,528,880
	20 –	726,956	1,002,263	1,232,142	1,590,440	1,448,613
	25 –	857,021	655,190	924,715	1,149,440	1,500,541
	30 –	809,061	811,044	613,431	877,296	1,097,622
	35 –	794,694	792,071	794,012	600,549	858,873
	40 –	607,821	751,781	749,299	751,135	568,119
	45 –	460,246	567,097	701,412	699,096	700,809
	50 –	402,843	420,025	517,760	640,389	638,275
	55 –	243,776	356,127	373,404	460,289	569,306
	60 –	260,548	208,185	305,840	318,885	393,087
	65 –	122,191	208,438	166,548	244,612	255,108
	70 –	110,501	86,633	147,783	118,083	173,472
	75 More	74,835	57,350	23,764	76,699	61,285
	Total	11,198,362	12,146,118	13,157,128	14,421,446	15,950,417
Grand Total		21,865,263	23,784,581	25,857,696	28,411,700	31,511,437
Growth Rate		1.697	1.685	1.902	2.093	

Source: Study Team.

rate and/or massive out-migration plans are achieved. The reason for this is that the younger generation produced in the baby-boom in the 1960s to 1970s will reach reproductive age in the 1980s and 1990s. The increasing crude birth rate in Table B.3 from 3.7 or 3.6 in the 1970s to 3.9 or 4.1 in the 1980s, well evidences the fact. A break-down of the number of births by the age brackets of mothers is to be found in Table B.2. On the other hand, the crude death rate will only gradually rise through the 1970s and 1980s, due to the fact that relatively large part of the population is still young in the duration of projection.

B.007   Two grave implications of this are that Central Java is going to have much more of an infant population to feed and educate, and a young adult population that requires abundant employment opportunities.

B.008   The consequence of the population growth will be further understood by referring to Table B.5, where the growth of population is disaggregated into the growth of the four age cohorts. Conspicuous is the fact that the age bracket of 0 to 14 is not expected to grow in the 1970s, but then resume expansion in the 1980s to reach at 12,313 thousand at the beginning of the 1990s; in contrast, the population in the age bracket of 15 to 29 will gain a great momentum of increase in the 1970s, and expansion will continue although the momentum will lessen in the 1980s. Age 30 to 44 will not grow significantly until the latter half of the 1980s, while age 45 and more will show a steady increase through the projected period. Consequently the share of the population below age 14 and the share between age 30 to 44 will decrease from 44 percent in 1971 to 39 percent in 1991 and from 19 percent to 15 percent in 1991, respectively. On the other hand, the age bracket of 15 to 29 will gain, from 22 percent to 29 percent, and the age bracket of 45 and more will increase from 15 percent to 17 percent.

B.009   The profound significance of this projection is that it implies the major problem to be faced in the human resources sector will be different in the coming 15 years from that which used to be. The number of children of school-age will not grow much until the middle of the 1980s, indicating that the ever-growing demand for resources for the younger generation, including education, will be lessened somewhat toward the end of the 1970s unless the enrollment rate sees a dramatic upsurge. But the remarkable expansion of population in the category of age 15 to 29 from 4,882 thousand in 1971 to 8,989 thousand in 1991, a nearly two-folds increase, will render the problem of employment creation the most serious and critical issue in the coming 15 years. This seemingly insurmountable problem deserves wider recognition of the people in the Province.

Table B.5   Growth of Population by Age Strata, 1971 – 1991

	1971	1976	1981	1986	1991
Age 0 - 14	9,510,672	9,954,416	9,936,785	10,809,512	12,312,854
Share (%)	43.5	41.9	38.4	38.4	39.0
Growth Rate (%)	0.9	0.0	1.7	2.6	
Age 15 - 29	4,881,971	5,802,124	7,692,073	8,572,684	8,988,605
Share (%)	22.3	24.4	29.7	30.4	28.5
Growth Rate (%)	3.5	5.8	2.2	1.0	
Age 30 - 44	4,211,608	4,276,268	3,827,328	4,107,880	4,985,306
Share (%)	19.3	17.9	14.8	14.6	15.8
Growth Rate (%)	0.3	2.2	1.4	3.9	
Age 45 -	3,260,952	3,892,891	4,401,512	4,689,055	5,224,672
Share (%)	14.9	16.3	17.0	16.6	16.6
Growth Rate (%)	3.6	2.5	1.3	2.2	
Total	21,805,263	23,784,581	25,857,698	28,179,131	31,511,437
Share (%)	100.0	100.0	100.0	100.0	100.0
Growth Rate (%)	1.7	1.7	1.9	2.1	

Source: Table B.4.

B.2 Population Growth Projection by Kabupaten/Kotamdya

B.010   The future population for each of kabupatens was calculated through the following procedure. First, the population for each year was predicted utilizing the average growth rate for each kabupaten for 1971 to 1976, which was calculated in Section 2.1.2 as a multiplier. Second, these figures are then adjusted so that the provincial total of the population coincides with the projection just described above. The computation was undertaken for the period of 1976 to 1983; the result is in Table B.6. It should be noted that the figures are based on the 1971 Census population, and that a few boundary changes that took place around Semarang are not taken into account. Until 1983, when the total population for the Province is projected at 26,851 thousand, Kotamadya Semarang will gain another 177 thousand (excluding the population included by boundary change) to mark 924; Kotamadya Tegal will gain another 23 thousand to reach at 143 thousand; Kabupaten Rembang will gain another 88 thousand to reach 507 at thousand; and Kabupaten Tegal will gain another 166 thousand to reach 33 thousand.

B.011   However, it should be remembered that these results are subject to change particularly according to the reliability of the estimates of the 1971 to 1976 average growth rate. Especially the amazing growth of kabupaten Cilacap is based on its high growth rate in 1971 to 1976, but the reliability of the projection is limited because of the possible abnormality of data as noted above. Also it should be kept in mind that the growth rate is likely to change, adjusting the economic and social conditions of each place.

Table B.6   Projected Future Population Growth By Kotamadya/Kabupaten, 1976 - 1983

| | | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | Average Annual Growth Rate | |
										1976 - 81	1981 - 83
1.	KDY Magelang	110,396	110,459	110,521	110,584	110,648	110,710	110,977	111,244	0.051	0.241
2.	KDY Surakarta	430,756	434,269	437,806	441,374	444,971	448,604	453,093	457,633	0.815	1.002
3.	KDY Salatiga	75,944	77,245	78,568	79,914	81,283	82,677	84,247	85,848	1.713	1.901
4.	KDY Semarang	746,467	769,115	792,450	816,493	841,265	866,771	894,786	923,706	3.034	3.232
5.	KDY Pekalongan	118,091	119,347	121,021	122,513	124,024	125,550	127,351	129,175	1.233	1.432
6.	KDY Tegal	119,567	122,557	125,622	128,764	131,985	135,286	138,941	142,695	2.501	2.702
7.	KB Cilacap.	1,378,414	1,419,739	1,462,303	1,506,142	1,551,296	1,597,836	1,648,806	1,701,436	2.998	3.192
8.	KB Banyumas	1,129,077	1,146,804	1,164,808	1,183,096	1,201,670	1,220,511	1,242,054	1,263,952	1.570	1.763
9.	KB Purbalingga	629,504	638,795	648,224	657,792	667,501	677,366	688,611	700,055	1.476	1.662
10.	KB Banjarnegara	640,779	650,955	661,292	671,793	682,461	693,304	705,590	718,100	1.588	1.773
11.	KB Kebumen	992,334	1,004,004	1,015,811	1,027,757	1,039,843	1,052,056	1,066,401	1,080,925	1.176	1.362
12.	KB Purworejo	672,579	675,182	677,795	680,418	683,051	685,699	689,624	693,575	0.387	0.573
13.	KB Wonosobo	564,476	574,275	584,245	594,387	604,706	615,217	627,095	639,272	1.736	1.933
14.	KB Magelang	909,374	925,834	942,591	959,652	977,022	994,718	996,697	998,691	1.810	2.002
15.	KB Boyolali	751,459	760,123	768,888	777,753	786,720	795,799	806,571	817,294	1.153	1.342
16.	KB Klaten	1,026,214	1,040,304	1,054,587	1,069,067	1,083,745	1,098,651	1,115,796	1,133,236	1.373	1.563
17.	KB Sukoharjo	551,183	563,326	575,736	588,419	601,382	614,642	629,332	644,386	2.203	2.392
18.	KB Wonogiri	944,693	955,131	965,685	976,636	987,145	998,040	1,010,957	1,024,029	1.105	1.293
19.	KB Karanganyar	547,646	557,055	566,625	576,359	586,261	596,332	609,548	623,055	1.718	2.216
20.	KB Sragen	703,488	716,313	729,371	742,667	756,206	769,998	785,492	801,304	1.823	2.013
21.	KB Grobogan	955,592	970,545	985,533	1,001,310	1,017,031	1,032,977	1,051,200	1,069,722	1.570	1.762
22.	KB Blora	673,747	684,695	695,822	707,129	718,620	730,308	743,603	757,152	1.625	1.822
23.	KB Rembang	419,759	431,084	442,714	454,659	466,926	479,514	493,372	507,621	2.698	2.888
24.	KB Pati	924,127	941,196	958,580	976,284	994,316	1,012,686	1,033,259	1,054,255	1.847	2.032
25.	KB Kudus	479,532	486,341	493,247	500,252	509,355	514,569	522,803	531,178	1.420	1.602
26.	KB Jepara	661,372	676,121	691,212	706,633	722,397	738,499	756,401	774,721	2.231	2.422
27.	KB Demak	635,992	649,355	658,855	668,494	678,274	688,207	699,566	711,123	1.463	1.652
28.	KB Semarang	714,683	722,001	729,395	736,864	744,409	752,042	761,380	770,844	1.024	1.243
29.	KB Temanggung	517,082	526,539	536,170	545,976	555,062	566,122	577,578	589,257	1.829	2.022
30.	KB Kendal	692,509	700,992	709,579	718,272	727,071	735,976	746,369	756,908	1.225	1.412
31.	KB Batang	477,931	482,543	487,200	491,901	496,648	501,442	507,222	513,070	0.965	1.153
32.	KB Pekalongan	606,355	617,221	628,281	639,540	651,001	662,661	675,794	689,182	1.792	1.981
33.	KB Pemalang	859,541	870,749	882,104	893,607	905,259	917,065	930,746	944,633	1.304	1.492
34.	KB Tegal	967,470	989,054	1,011,120	1,033,678	1,056,739	1,080,244	1,106,372	1,133,058	2.231	2.412
35.	KB Brebes	1,151,753	1,173,659	1,195,982	1,218,730	1,241,910	1,265,546	1,291,993	1,314,009	1.902	2.091
	Total	23,784,581	24,185,460	24,593,096	25,007,602	25,429,095	25,857,696	26,349,509	26,850,676	1.685	1.902

Source: Mission's estimate.

APPENDIX C

LABOR FORCE STATISTICS

Table C.1 Population 10 Years or More by Types of Activity, Central Java, 1971

	Economically Active				Attending School	House-keeping	Income Recipient, Others, Not Stated	Total 10 Years or More	Total 10 Years or More as % of Total Pop.	Total Population
	Employed	Seeking Work		Total						
		Total	For the 1st Time							
Male Urban	437,571	37,115	13,339	474,686	218,373	26,850	88,553	808,465	71.3	1,134,518
Rural	4,563,317	177,799	31,267	4,741,116	878,790	248,205	554,805	6,422,916	67.4	9,532,383
Female Urban	279,598	25,113	7,886	304,711	170,624	341,286	82,840	899,461	74.3	1,210,672
Rural	2,465,303	130,652	20,717	2,595,955	607,379	2,971,785	724,860	6,899,979	69.1	9,987,690
Urban	717,169	62,228	21,225	779,397	388,997	368,136	171,393	1,707,923	72.8	2,345,190
Rural	7,028,620	308,451	51,984	7,337,071	1,486,169	3,219,990	1,279,665	13,322,895	68.3	19,520,073
Total	7,745,789	370,679	73,209	8,116,468	1,875,166	3,588,126	1,451,058	15,040,818	68.8	21,865,263

(Percent)	Employed	Seeking Work		Total	Attending School	House-keeping	Income Recipient, Others, Not Stated	Total	Economically Active Population as % of Total Population
		Total	For the 1st Time						
Male Urban	54.1	4.6	1.6	58.7	27.0	3.3	11.0	100.0	41.8
Rural	71.0	2.8	0.5	73.8	13.7	3.9	8.6	100.0	50.0
Female Urban	31.1	2.8	0.9	33.9	22.8	21.6	10.0	100.0	25.2
Rural	35.7	1.9	0.3	37.6	8.8	43.1	10.5	100.0	26.0
Urban	42.0	3.6	1.2	45.7	22.8	21.6	10.0	100.0	33.2
Rural	52.8	2.3	0.4	55.1	11.2	24.2	9.6	100.0	37.6
Total	51.4	2.5	0.5	53.9	12.5	23.9	9.7	100.0	37.1

Source: 1971 Census, Seri E.

Table C.2 Economically Active Population as Percent of Population of 10 Years or More, 1971

(Unit: Percent)

Age	Male		Female		Male	Female	Urban	Rural	Total
	Urban	Rural	Urban	Rural					
10-14	6.2	23.7	8.1	17.5	21.8	16.5	7.2	20.7	19.2
15	27.9	60.2	27.4	38.1	56.0	36.6	27.6	49.1	46.3
20	64.4	82.8	37.4	38.4	80.2	38.2	50.4	58.5	57.4
25	88.3	93.5	37.9	39.0	92.9	38.9	60.1	61.9	61.7
30	94.8	95.7	43.2	42.7	95.6	42.8	66.1	66.5	66.5
35	95.4	96.3	46.5	46.2	96.2	46.2	68.4	70.4	70.2
40	93.4	95.7	49.0	49.4	95.5	49.4	70.7	72.6	72.4
45	89.3	94.8	48.9	49.1	94.2	49.1	68.9	72.6	72.2
50	83.9	93.1	46.6	45.7	92.1	45.9	64.1	68.9	68.4
55	69.9	89.2	39.9	42.3	86.9	42.0	54.4	65.8	64.4
60	57.6	83.3	35.5	35.8	80.6	35.8	44.9	56.5	55.3
65	47.6	77.2	29.2	32.7	73.9	32.2	37.1	53.5	51.5
70	38.5	64.3	21.9	24.8	61.7	24.4	28.8	43.9	42.2
75	24.3	48.5	12.8	15.8	45.9	15.3	17.3	32.3	30.3
Total Population	58.7	73.8	33.9	37.6	72.1	37.2	45.6	55.1	54.0

Source: 1971 Population Census Seri E.

C-2

Table C.3   Percentage Share of Types of Activity of Population

of 10 Years or More by Age, 1971

(Unit: Percent)

Age	Number	Economically Active			Attending School	House-keeping	Others	Total
		Employed	Seeking Work	Total				
Male								
10-14	1,380,806	20.0	2.7	21.7	57.1	6.0	15.2	100.0
15-19	1,027,192	51.9	5.7	56.0	24.8	6.1	13.1	100.0
20-24	610,792	74.6	7.8	80.2	8.0	3.9	7.8	100.0
25-29	626,544	89.5	4.0	93.0	0.9	2.4	3.8	100.0
30-34	658,907	92.7	2.9	95.6	0.0	2.0	2.4	100.0
35-39	734,582	93.5	2.7	96.2	0.0	1.5	2.3	100.0
40-44	606,543	93.0	2.6	95.5	0.0	2.0	2.7	100.0
45-49	481,133	91.8	2.4	94.2	0.0	1.8	4.0	100.0
50-54	383,047	89.7	2.4	92.1	0.0	2.3	5.5	100.0
55-59	242,467	84.9	2.0	87.0	0.0	3.1	10.1	100.0
60-64	201,415	78.0	2.6	80.6	0.0	4.9	14.4	100.0
65-69	105,304	71.4	2.5	73.9	0.0	5.8	20.2	100.0
70-74	100,864	59.7	2.0	61.7	0.0	7.5	30.7	100.0
75-	71,780	43.0	2.8	45.8	0.0	7.9	46.1	100.0
M.Total	7,231,378	67.2	3.5	72.1	15.2	3.8	8.9	100.0
Female								
10-14	1,295,481	14.7	2.4	16.5	48.2	17.0	18.2	100.0
15-19	1,033,466	34.2	3.4	36.6	13.3	37.0	13.1	100.0
20-24	726,756	35.7	3.2	38.2	2.0	53.8	5.8	100.0
25-29	857,021	36.7	2.3	38.8	0.2	57.7	3.3	100.0
30-34	809,061	40.8	1.9	42.8	0.0	54.2	3.0	100.0
35-39	794,694	44.1	2.0	46.2	0.0	50.8	3.0	100.0
40-44	607,821	47.3	2.1	49.4	0.0	46.4	4.2	100.0
45-49	460,246	47.3	1.8	49.1	0.0	45.5	5.4	100.0
50-54	402,843	44.0	1.9	45.9	0.0	43.1	11.0	100.0
55-59	243,776	40.0	2.1	42.0	0.0	43.0	15.0	100.0
60-64	260,548	34.4	1.4	35.8	0.0	39.3	24.9	100.0
65-69	122,191	30.6	1.7	32.2	0.0	39.9	27.9	100.0
70-74	110,501	22.7	1.7	24.4	0.0	34.1	41.5	100.0
75-	74,833	14.0	1.3	15.3	0.0	30.2	54.5	100.0
F.Total	7,799,440	35.2	2.4	37.2	10.0	42.5	20.3	100.0

Source: 1971 Population Census Seri E.

Table C.4 Population of 10 Years or More by Types of Activity

KB/KDY	Population 10 Years or More	Percentage Distribution									
		Employed Work	Seeking Work	First Time	Total	Total Attending School	House-keeping	Income Recipient	Others	Not Stated	Total
1. KDY Magelang	80,048	40.4	2.1	0.6	42.7	25.4	19.5	2.6	9.8	0.2	100.0
2. KDY Surakarta	308,858	41.3	3.7	1.1	42.0	23.7	20.2	2.8	7.8	0.6	100.0
3. KDY Salatiga	50,804	42.0	6.7	2.4	48.6	22.2	21.2	2.6	4.6	0.8	100.0
4. KDY Semarang	466,694	44.1	4.1	1.2	48.2	21.2	21.9	2.0	6.0	0.5	100.0
5. KDY Pekalongan	81,405	51.4	4.1	2.2	53.6	16.8	19.8	1.9	5.7	0.5	100.0
6. KDY Tegal	78,586	38.9	1.7	0.8	40.7	23.5	26.5	2.1	6.7	0.5	100.0
7. KB Cilacap	783,874	57.4	1.6	0.2	59.0	9.9	22.5	0.7	7.1	0.8	100.0
8. KB Banyumas	717,819	48.3	2.9	0.3	51.2	15.3	24.5	1.2	7.7	0.2	100.0
9. KB Purbalingga	402,248	54.9	1.4	0.2	56.4	10.1	26.9	0.3	6.1	0.2	100.0
10. KB Banjarnegara	407,952	62.4	1.0	0.0	63.5	9.5	22.9	0.8	3.1	0.2	100.0
11. KB Kebumen	635,384	48.9	1.9	0.6	50.8	14.1	22.4	0.7	11.4	0.5	100.0
12. KB Purworejo	450,170	49.2	1.2	0.3	50.4	16.6	25.1	1.2	6.4	0.3	100.0
13. KB Wonosobo	334,653	64.2	1.2	0.1	65.4	11.6	21.8	1.7	5.3	0.1	100.0
14. KB Magelang	589,482	60.7	3.0	0.2	63.7	10.2	18.9	0.3	6.6	0.3	100.0
15. KB Boyolali	492,128	49.8	2.8	0.3	52.6	13.9	21.9	0.6	10.3	0.6	100.0
16. KB Klaten	672,345	48.4	2.2	0.7	50.6	16.6	25.0	1.3	6.1	0.4	100.0
17. KB Sukoharjo	341,351	49.4	4.1	0.3	53.5	12.7	21.4	1.1	10.7	0.6	100.0
18. KB Wonogiri	621,947	50.6	3.1	0.3	53.7	14.6	23.0	0.5	7.8	0.3	100.0
19. KB Karanganyar	354,844	41.4	4.2	2.2	45.6	12.8	28.9	0.5	11.3	0.8	100.0
20. KB Sragen	441,075	40.8	2.1	0.3	42.9	12.7	31.8	0.8	11.2	0.5	100.0
21. KB Grobogan	590,831	51.8	2.0	0.3	53.8	12.5	25.5	0.7	6.7	0.7	100.0
22. KB Blora	438,680	49.3	1.0	0.2	50.3	11.6	27.1	1.0	9.3	0.7	100.0
23. KB Rembang	258,444	57.3	2.3	0.6	59.6	9.4	24.3	0.4	6.0	0.3	100.0
24. KB Pati	572,654	49.9	2.6	0.9	52.4	11.4	27.0	1.3	6.8	0.9	100.0
25. KB Kudus	309,586	56.1	1.9	0.6	58.6	21.3	19.7	0.8	5.7	0.3	100.0
26. KB Jepara	396,755	50.8	3.8	0.6	54.6	12.1	23.4	0.5	8.3	1.2	100.0
27. KB Demak	387,068	53.8	3.1	0.7	56.9	9.2	24.9	0.7	6.9	1.4	100.0
28. KB Semarang	468,299	44.1	4.1	1.2	48.2	21.3	21.9	2.0	6.0	0.5	100.0
29. KB Temanggung	326,385	50.6	2.1	0.2	52.7	13.3	27.5	0.7	5.5	0.3	100.0
30. KB Kendal	442,227	59.2	1.7	0.4	60.9	10.1	19.8	0.8	7.8	0.5	100.0
31. KB Batang	312,505	52.9	3.4	0.2	56.3	9.6	24.4	0.6	8.8	0.3	100.0
32. KB Pekalongan	379,099	51.4	4.1	2.2	55.4	16.8	19.8	1.8	5.7	0.5	100.0
33. KB Pemalang	540,319	47.3	3.4	0.6	50.7	7.3	27.4	0.9	13.1	0.6	100.0
34. KB Tegal	576,585	55.2	1.5	0.4	56.7	7.8	22.7	0.6	10.9	0.3	100.0
35. KB Brebes	699,734	53.5	2.1	0.2	55.7	8.0	23.0	0.8	11.9	0.6	100.0
Central Java Total	15,030,818	51.5	2.5	0.5	54.0	12.5	23.8	0.9	8.3	0.5	100.0

Source: 1971 Census, Seri E.

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Table C.5 Percent Distribution of Educational Attainment Among Population 10 Years
Old or More, 1971

(Unit: Percent)

Population 10 Years Old or More	Male	Female	Urban	Rural	Total
Total Population in Persons	7,231,378	7,799,440	1,707,923	13,322,895	15,030,818
No School	31.4	57.0	25.4	47.2	44.7
Not Yet Finished P.S,	41.6	29.0	28.6	35.9	35.0
Primary School	19.6	10.6	24.6	13.7	14.9
Junior Sec. General	3.0	1.7	9.3	1.4	2.3
Vocational	1.9	0.7	3.7	1.0	1.3
Senior Sec. General	1.1	0.4	3.8	0.3	0.7
Vocational	1.2	0.5	3.2	0.5	0.8
Academy	0.2	0.0	0.7	0.0	0.1
University	0.2	0.0	0.6	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0

Source : 1971 Census Seri E. No.11.

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Table C.6   Distribution of Education Attainment by Urban and Rural

(Unit: Persons)

Population 10 Years Old or More	Number			Percent Distribution		
	Urban	Rural	Total	Urban	Rural	Total
Primary School	420,998	1,822,917	2,243,915	(18.8)	(81.2)	100.0
Junior Sec. School	220,659	319,727	540,386	(40.8)	(59.2)	100.0
Senior Sec. School	120,505	108,492	228,997	(52.6)	(47.4)	100.0
Academy and University	23,878	9,609	33,487	(71.3)	(18.7)	100.0
Total	1,707,923	13,322,195	15,030,818	(11.4)	(88.6)	100.0

Source : 1971 Census Seri E. No. 11.

Table C.7 Educational Attainment of the Population by Age

Age	No Schooling	Not Yet Finished Primary School	Primary School	Junior Sec. School	Senior Sec. School	College or University	Total
10-14	510,386	1,920,532	230,983	14,386	0	0	2,676,287
15-19	412,578	808,101	611,400	196,378	31,730	471	2,060,658
20-24	339,765	451,742	346,585	107,790	85,094	6,772	1,337,748
25-29	587,607	476,171	296,127	68,717	44,638	10,305	1,483,565
30-34	758,703	407,388	207,251	57,742	30,568	6,316	1,467,968
35-39	882,029	424,994	164,396	33,059	19,394	5,404	1,529,276
40-44	768,094	284,891	131,530	20,605	7,212	2,032	1,214,364
45-49	615,558	203,254	102,031	15,728	3,826	982	941,379
50-54	575,876	129,137	68,036	9,685	2,696	462	785,892
55-59	367,159	72,650	37,449	7,852	1,677	456	486,243
60-64	390,170	43,908	22,579	4,049	1,121	135	461,963
65-69	191,303	21,460	12,294	1,812	554	72	227,495
70-74	184,575	16,141	8,562	1,681	347	59	211,365
75-	133,181	7,779	4,692	902	140	21	146,615
Total	6,716,884	5,267,149	2,243,915	540,386	228,997	33,487	15,030,818

Source: 1971 Population Census Seri E. No.11.

Table C.8 Percentage Distribution of Educational Attainment of the Population by Age

Age	Total Number	No School	Not Yet Finished Primary School	Primary School	Junior Sec. School General	Junior Sec. School Vocational	Senior Sec. School General	Senior Sec. School Vocational	Academy	University	Total
Urban & Rural											
10-14	2,676,280	19.1	71.8	8.6	0.4	0.1	-	-	-	-	100.0
15-19	2,260,658	20.0	39.2	29.7	6.9	2.7	0.7	0.9	-	-	100.0
20-24	1,337,748	25.4	33.8	25.9	5.2	2.9	3.1	3.3	0.3	0.2	100.0
25-29	1,483,565	39.6	32.1	20.0	2.8	1.9	1.5	1.5	0.3	0.4	100.0
30-34	1,467,968	51.7	27.8	14.1	2.3	1.7	1.0	1.1	0.2	0.2	100.0
35-39	1,529,276	57.6	27.9	10.7	1.2	1.0	0.6	0.7	0.2	0.2	100.0
40-44	1,214,364	63.3	23.5	10.8	0.9	0.8	0.3	0.3	0.1	0.1	100.0
45-49	941,379	65.4	21.6	10.8	0.9	0.8	0.2	0.2	0.1	-	100.0
50-54	785,892	73.3	16.4	8.7	0.7	0.5	0.2	0.2	-	-	100.0
55-59	486,243	75.5	14.7	7.7	0.8	0.8	0.1	0.2	0.1	-	100.0
60-64	461,973	84.5	9.5	4.9	0.4	0.4	0.1	0.2	-	-	100.0
65-69	227,495	84.1	9.4	5.4	0.4	0.4	-	-	0.2	-	100.0
70-74	211,365	87.3	7.6	4.1	0.4	0.4	0.1	0.1	-	-	100.0
75-	146,615	90.8	5.3	3.2	0.3	0.3	-	0.1	-	-	100.0
U.&R. Total	15,030,818	44.7	35.0	14.9	2.3	1.3	0.7	0.8	0.1	0.1	100.0
Urban											
10-14	297,494	7.3	76.2	15.0	1.2	0.2	-	-	-	-	100.0
15-19	270,968	6.2	21.4	37.7	22.2	6.5	2.8	3.0	0.1	-	100.0
20-24	180,027	8.0	15.2	27.1	17.1	5.7	13.9	10.5	1.6	0.9	100.0
25-29	146,690	16.8	17.1	27.8	12.9	5.3	8.9	6.5	2.4	2.4	100.0
30-34	149,801	28.7	18.3	24.1	10.5	5.1	5.5	4.7	1.5	1.5	100.0
35-39	154,728	36.5	22.6	22.3	5.8	3.6	3.6	3.1	1.1	1.4	100.0
40-44	134,187	39.7	20.7	26.4	4.9	3.4	2.0	1.7	0.7	0.6	100.0
45-49	106,118	42.1	19.0	27.5	4.8	3.1	1.2	1.6	0.4	0.4	100.0
50-54	88,606	50.8	17.0	23.5	4.0	2.4	1.0	1.4	0.2	0.2	100.0
55-59	59,084	54.5	16.8	19.5	3.9	2.4	0.9	1.2	0.3	0.3	100.0
60-64	48,470	64.8	13.6	15.7	2.6	1.2	0.6	1.3	0.2	-	100.0
65-69	27,907	64.6	13.4	16.1	2.2	1.6	0.4	0.8	0.1	0.2	100.0
70-74	23,994	70.7	12.3	12.8	1.5	1.6	0.1	0.5	0.2	-	100.0
75-	19,849	77.0	11.5	9.2	0.6	1.0	0.2	0.5	-	0.1	100.0
U. Total	1,707,923	25.4	28.6	24.6	9.3	3.7	3.8	3.2	0.7	0.6	100.0
Rural											
10-14	2,378,793	20.5	71.2	7.8	0.3	0.1	-	-	-	-	100.0
15-19	1,789,690	22.1	41.9	28.4	4.6	2.1	0.3	0.5	-	-	100.0
20-24	1,157,721	28.1	36.7	25.7	3.4	2.4	1.4	2.2	0.1	0.1	100.0
25-29	1,336,875	42.1	33.7	19.1	1.7	1.5	0.6	1.0	0.1	0.1	100.0
30-34	1,318,167	54.3	28.8	13.0	1.3	1.3	0.4	0.7	0.7	0.1	100.0
35-39	1,374,548	60.1	28.4	9.5	0.7	0.7	0.2	0.4	0.1	0.1	100.0
40-44	1,080,177	66.2	23.8	8.9	0.4	0.5	0.1	0.1	-	-	100.0
45-49	835,261	68.3	21.9	8.7	0.4	0.5	0.1	-	-	-	100.0
50-54	697,286	76.1	16.4	6.8	0.3	0.3	0.1	0.1	-	-	100.0
55-59	427,159	78.4	14.4	6.1	0.4	0.3	-	-	-	-	100.0
60-64	413,493	86.8	9.0	3.6	0.2	0.2	-	-	-	-	100.0
65-69	199,588	86.8	8.9	3.9	0.2	0.3	-	-	-	-	100.0
70-74	187,371	89.5	7.0	2.9	0.2	0.3	0.1	-	-	-	100.0
75-	126,766	92.9	4.3	2.3	0.3	0.2	-	-	-	-	100.0
R. Total	13,322,895	47.2	35.9	13.7	1.4	1.0	0.3	0.5	-	-	100.0

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Table C.9 Percentage Distribution and Average ...

Table C.9   Percentage Distribution and Average Educational Attainment

of Population Age 10 Years or More, 1971

KB/KDY	No School	Not Yet Finished Prim. Sch.	Primary School	Junior Secondary School General	Junior Secondary School Vocational	Senior Secondary School General	Senior Secondary School Vocational	Academy	University	Total	Average Years of Education[1]
1. KDY Magelang	20.0	25.5	28.4	11.8	3.8	5.3	3.6	1.1	0.6	100.0	4.84
2. KDY Surakarta	24.7	26.4	24.8	10.4	4.6	3.9	3.4	0.9	0.7	100.0	4.39
3. KDY Salatiga	22.6	27.8	28.7	9.1	4.7	3.3	2.2	0.9	0.6	100.0	4.30
4. KDY Semarang	24.8	28.5	23.3	9.7	4.9	3.3	3.5	1.0	1.0	100.0	4.25
5. KDY Pekalongan	31.4	34.0	20.6	7.4	2.3	2.2	1.5	0.2	0.4	100.0	3.27
6. KDY Tegal	25.2	30.1	23.4	7.6	3.7	3.7	5.5	0.3	0.5	100.0	4.18
7. KB Cilacap	43.0	41.3	12.0	1.6	0.4	1.0	0.5	0.1	0.1	100.0	1.93
8. KB Banyumas	28.3	41.7	23.3	2.7	0.9	2.1	0.9	0.1	0.1	100.0	2.94
9. KB Purbalingga	39.0	44.0	13.9	1.5	0.2	1.0	0.3	0.1	0.1	100.0	2.04
10. KB Banjarnegara	48.9	35.6	12.7	1.0	0.2	1.0	0.5	0.12	-	100.0	1.78
11. KB Kebumen	35.7	38.3	20.6	2.5	0.5	1.5	0.8	-	-	100.0	2.58
12. KB Purworejo	38.6	32.8	22.3	3.3	0.6	1.2	1.0	-	0.1	100.0	2.64
13. KB Wonosobo	39.4	38.7	19.0	1.0	0.3	1.0	0.4	0.1	-	100.0	2.22
14. KB Magelang	46.1	34.7	15.3	1.7	0.8	0.9	0.5	0.1	-	100.0	2.07
15. KB Boyolali	54.0	26.6	14.3	1.9	0.4	1.6	0.9	0.1	0.1	100.0	1.93
16. KB Klaten	47.7	26.4	17.3	3.0	0.8	2.5	1.8	0.3	0.2	100.0	2.47
17. KB Sukoharjo	55.4	25.5	13.3	1.7	0.9	1.9	1.0	0.1	0.1	100.0	1.90
18. KB Wonogiri	52.0	31.6	12.8	1.9	0.4	0.9	0.5	-	-	100.0	1.77
19. KB Karanganyar	60.0	22.0	13.4	2.3	0.8	1.2	0.5	-	-	100.0	1.72
20. KB Sragen	62.7	21.0	11.4	1.8	0.3	1.6	1.1	0.1	0.1	100.0	1.63
21. KB Grobogan	40.2	39.5	17.2	1.0	0.3	1.3	0.4	-	-	100.0	2.15
22. KB Blora	48.7	35.0	11.6	2.3	0.5	0.9	0.7	-	0.1	100.0	1.86
23. KB Rembang	44.8	42.4	10.4	1.0	0.4	0.6	0.3	0.1	-	100.0	1.70
24. KB Pati	44.8	39.0	12.6	1.4	0.4	1.2	0.6	-	-	100.0	1.92
25. KB Kudus	44.0	31.8	17.0	3.3	0.8	1.5	1.2	0.1	0.1	100.0	2.37
26. KB Jepara	49.8	35.7	12.2	1.0	0.2	0.7	0.3	-	-	100.0	1.68
27. KB Demak	45.7	44.0	8.7	0.8	0.2	0.3	0.2	-	-	100.0	1.56
28. KB Semarang	40.7	40.0	16.0	1.9	0.3	0.7	0.4	-	-	100.0	2.10
29. KB Temanggung	25.4	51.0	19.8	2.1	0.5	1.1	0.4	-	-	100.0	3.23
30. KB Kendal	43.6	42.2	11.7	1.2	0.2	0.6	0.3	-	0.1	100.0	1.81
31. KB Batang	43.8	40.5	12.9	1.7	0.2	0.7	0.2	0.1	0.00	100.0	1.86
32. KB Pekalongan	51.7	33.9	12.2	1.2	0.2	0.4	0.2	-	-	100.0	1.63
33. KB Pemalang	54.6	34.3	6.7	1.2	0.3	0.5	0.3	-	0.1	100.0	1.48
34. KB Tegal	57.1	33.1	7.8	0.8	0.2	0.7	0.4	-	-	100.0	1.68
35. KB Brebes	56.9	32.3	8.9	1.2	0.2	0.4	0.4	-	-	100.0	1.39
Central Java Total	44.69	35.04	14.93	2.31	0.71	1.28	0.81	0.12	0.10	100.00	2.17

Note: 1/ Calculated assuming two years of education for "Not finished P.S." and the legal duration required for completion for other
education. The total education years are divided by 10 years or more population to get the average.

Source: 1971 Census Seri E. No.11.

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Table C.10 - Percent Distribution of Labor Force [1] by Industry, 1971

(Unit: Persons and Percent)

	Urban		Rural		Urban	Rural	Male	Female	Total
	Male	Female	Male	Female					
Number of Labor Force (in Persons)	474,686	304,711	4,741,116	2,595,755	779,397	7,337,071	5,215,802	2,900,666	8,116,468
Agriculture Fishery	7.8	3.5	73.6	60.0	6.1	68.8	67.6	54.1	62.8
Mining	0.3	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0
Manufacturing	17.0	16.1	7.2	13.3	16.6	9.4	8.1	13.6	10.1
Electricity	0.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Construction	5.7	0.3	1.9	0.0	3.7	1.3	2.3	0.0	1.5
Trade, Hotel	18.7	37.8	6.4	19.1	26.9	11.0	7.5	21.3	12.4
Transport, Comm.	11.8	0.5	1.5	0.0	7.4	1.0	2.5	0.0	1.6
Finance, Insur.	1.5	0.4	0.07	0.0	1.1	0.0	0.2	0.0	0.1
Community, Social	32.2	33.7	7.9	5.1	32.9	6.9	10.1	8.1	9.4
Act. Not Adequately Defined	4.2	5.6	1.2	2.3	4.8	1.6	1.5	2.7	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: 1/ The same as the Economically Active Population.

Source: 1971 Census Seri E. No.11.

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Table C.11   Percentage Distribution of Economically Active Population by Industry, 1971

KB/KDY	Economically Active Population (in Persons)	Percentage Distribution						
		Agriculture, Hunting	Mining, Mnfg.	Public Utility & Constr.	Trade, Trans. Service	Comm. Service	Not Defined	Total
1. KDY Magelang	33,987	2.9	10.4	3.4	32.6	47.5	3.1	100.0
2. KDY Surakarta	139,060	1.5	24.4	3.6	33.3	32.6	4.5	100.0
3. KDY Salatiga	24,709	8.3	12.7	3.8	34.1	31.9	0.2	100.0
4. KDY Semarang	224,723	3.7	13.3	5.6	34.5	38.2	4.8	100.0
5. KDY Pekalongan	45,131	2.8	43.2	1.7	25.7	20.7	5.7	100.0
6. KDY Tegal	31,965	8.5	24.8	3.7	31.9	27.6	3.4	100.0
7. KB Cilacap	462,586	78.0	4.9	0.8	9.5	5.8	1.0	100.0
8. KB Banyumas	367,213	53.7	11.4	1.9	20.5	11.3	1.3	100.0
9. KB Purbalingga	226,906	55.1	18.2	0.5	17.2	8.0	1.0	100.0
10. KB Banjarnegara	258,894	72.1	13.6	0.4	8.7	4.9	0.3	100.0
11. KB Kebumen	323,296	61.6	14.8	1.7	11.5	8.6	1.9	100.0
12. KB Purworejo	227,005	69.8	6.7	1.6	12.4	8.3	1.2	100.0
13. KB Wonosobo	218,763	79.2	3.4	0.8	9.6	6.4	0.6	100.0
14. KB Magelang	375,353	79.2	4.2	1.0	8.3	6.2	1.1	100.0
15. KB Boyolali	258,897	74.4	5.1	0.6	10.8	7.6	1.6	100.0
16. KB Klaten	340,239	46.6	17.3	3.5	19.1	11.5	2.1	100.0
17. KB Sukoharjo	182,756	50.9	15.3	3.0	22.1	6.7	1.9	100.0
18. KB Wonogiri	334,101	83.5	3.9	0.6	6.1	4.6	1.4	100.0
19. KB Karanganyar	161,862	65.3	11.0	2.6	6.9	6.8	7.5	100.0
20. KB Sragen	189,095	62.0	11.9	1.8	11.9	10.9	1.4	100.0
21. KB Grobogan	317,929	77.0	1.9	1.2	10.6	8.0	1.3	100.0
22. KB Blora	220,564	75.6	3.5	1.3	11.4	17.5	0.8	100.0
23. KB Rembang	154,043	68.1	10.4	0.6	12.1	7.2	1.6	100.0
24. KB Pati	300,248	62.0	10.1	0.6	14.2	8.9	4.2	100.0
25. KB Kudus	181,501	37.4	27.4	3.9	18.8	10.9	1.6	100.0
26. KB Jepara	216,552	63.9	14.0	1.1	11.1	7.5	2.4	100.0
27. KB Demak	220,157	72.6	6.1	0.7	11.4	6.7	2.4	100.0
28. KB Semarang	246,845	73.5	4.9	0.8	8.6	9.3	2.9	100.0
29. KB Temanggung	172,177	67.6	7.2	1.0	12.9	9.9	1.5	100.0
30. KB Kendal	269,658	73.5	4.3	0.8	12.4	8.1	0.9	100.0
31. KB Batang	175,838	70.8	8.0	2.2	10.9	6.4	1.8	100.0
32. KB Pekalongan	224,497	41.3	34.6	2.0	13.9	6.8	1.3	100.0
33. KB Pemalang	273,750	68.3	5.5	1.8	14.4	8.1	2.0	100.0
34. KB Tegal	326,690	59.3	9.0	1.7	19.7	8.6	1.7	100.0
35. KB Brebes	389,478	69.6	5.4	1.1	14.5	8.0	1.4	100.0
Total	8,116,468	62.8	10.2	1.6	14.0	9.5	1.9	100.0

Source: 1971 Census Seri E. No.11.

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Table C.12   Percent Distribution of Labor Force by Occupation

	Urban			Rural			Total
	Male	Female	Male&Female	Male	Female	Male&Female	
Total (in Persons)	474,686	304,711	779,397	4,741,116	2,595,955	7,337,071	8,116,468
Proffess. Technical	4.9	7.6	6.0	1.9	1.5	1.7	2.2
Administrative	1.8	0.3	1.2	0.4	0.1	0.3	0.4
Clerical	13.4	3.8	9.7	2.9	0.2	2.0	2.7
Sales	18.5	39.4	26.7	6.4	19.1	10.9	12.4
Service	8.6	20.0	13.0	2.0	3.0	2.4	3.4
Farmers	7.2	3.3	5.7	72.0	57.7	66.9	61.1
Construction, Transport	36.8	19.8	39.1	11.6	13.9	12.4	14.1
Others	8.7	5.8	7.6	2.8	4.5	3.4	3.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source : Table C.13.

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Table C.13　Distribution of Labor Force by Occupation, 1971

(Unit: Persons)

	Urban			Rural			Total
	Male	Female	Male & Female	Male	Female	Male & Female	
Professeional; Technical	23,409	23,275	46,684	89,375	38,587	127,962	174,646
Administrative	8,605	1,006	9,611	18,738	1,736	20,474	30,085
Clerical	63,696	11,642	75,338	136,157	5,702	141,859	217,197
Sales	87,823	120,017	207,840	305,461	495,455	800,916	1,008,756
Service	40,863	60,775	101,638	96,990	77,073	174,063	275,701
Farmers	34,169	9,961	44,130	3,414,796	1,499,824	4,914,620	4,958,750
Production, Trans.	174,615	60,370	234,985	548,500	357,851	906,351	1,141,336
Others	41,506	17,665	59,171	131,099	119,727	250,826	309,997
Total	474,686	304,711	779,397	4,741,116	2,595,955	7,337,071	8,116,468

Source: 1971 Population Census Seri E. No.11.

Table C.14 Economically Active Population by Employment Status and Industry

(Unit: Persons and Percent in Parenthesis)

Industry	Employment Status					
	Self-Employed (or Own Account) Worker	Employer	Employee	Unpaid Family Worker	Seeking Work for the First Time	Total
Agriculture, Hunting, Forestry and Fishing	1,671,222 (32.8)	291,318 (5.7)	1,554,902 (30.5)	1,577,211 (31.0)	0	5,094,653 (100.0)
Mining and Quarrying	132 (1.8)	353 (4.9)	6,509 (89.7)	261 (3.6)	0	7,255 (100.0)
Manufacturing	181,977 (22.2)	33,081 (4.0)	478,676 (58.5)	124,562 (15.2)	0	818,296 (100.0)
Electricity, Gas and Water	176 (3.5)	67 (1.3)	4,658 (93.7)	70 ((1.4)	0	4,971 (100.0)
Construction	8,165 (6.7)	2,882 (2.4)	108,353 (89.0)	2,364 (1.9)	0	121,764 (100.0)
Trade, Restaurants and Hotels	710,390 (70.3)	37,309 (3.7)	134,309 (13.3)	127,970 (12.7)	0	1,009,978 (100.0)
Transport, Storage and Communication	33,520 (25.5)	3,045 (2.3)	92,226 (70.2)	2,526 (1.9)	0	131,317 (100.0)
Financing, Insurance, Real Estate and Business Services	303 (2.5)	762 (6.3)	10,957 (90.3)	107 (0.8)	0	12,129 (100.0)
Community, Social and Personel Service	73,748 (9.7)	14,731 (1.9)	646,094 (84.8)	27,674 (3.6)	0	762,247 (100.0)
Activities Not Adequately Defined	12,093 (7.9)	1,494 (1.0)	23,642 (15.4)	43,420 (28.2)	73,209 (47.6)	153,858 (100.0)
Total	2,691,726 (33.2)	385,042 (4.7)	3,060,326 (37.7)	1,906,165 (23.5)	73,209 (0.9)	8,116,468 (100.0)

Source: 1971 Census Seri E. No.11.

Table C.15   Economically Active Population by Employment Status and Occupation, 1971

	Total Ec. Ac. Population	Percentage Distribution					
		Own-Account	Employer	Employee	Unpaid F. Worker	Seeking Work for 1st Year	Total
Male							
Professional	112,784	4.6	2.1	91.4	1.9	-	100.0
Adm. & Management	27,343	4.7	22.7	71.4	1.2	-	100.0
Clerical & Rel.	199,853	3.3	2.4	93.1	1.1	-	100.0
Sales Workers	393,284	67.7	6.0	17.7	8.6	-	100.0
Services Workers	137,853	9.0	1.3	84.5	5.1	-	100.0
Farmers	3,448,965	41.8	6.5	28.5	23.3	-	100.0
Production Workers	723,115	22.8	4.0	67.7	5.6	-	100.0
Others	172,605	7.0	1.5	37.6	28.2	25.8	100.0
M. Total	5,215,802	36.6	5.6	38.9	18.0	0.9	100.0
Female							
Professional	61,862	8.7	1.3	88.2	1.9	-	100.0
Adm. & Management	2,742	24.1	45.9	22.7	7.3	-	100.0
Clerical & Rel.	17,344	2.2	1.2	95.2	1.4	-	100.0
Sales Workers	615,472	72.5	2.5	9.8	15.2	-	100.0
Services Workers	137,848	5.7	0.9	87.1	6.3	-	100.0
Farmers	1,509,785	14.5	4.2	35.5	45.8	-	100.0
Production Workers	418,221	22.0	1.5	53.7	22.8	-	100.0
Others	137,392	8.3	1.1	12.4	57.4	20.8	100.0
F. Total	2,900,666	27.0	3.1	35.5	33.4	1.0	100.0

Source: 1971 Census Seri E. No.11.

Table C.16 Percent Distribution of Economically Active Population
by Employment Status and by Age, Central Java, 1971

	10-14	15-	20-	25-	30-	35-	40-	45-	50-	55-	Total
Total Male	300,710	575,071	489,936	582,213	629,874	706,650	579,166	453,371	352,690	546,121	5,215,802
Own Account	4.2	9.3	20.6	34.0	41.4	45.7	47.2	48.0	49.7	53.8	36.6
Employer	0.6	0.9	2.2	4.0	5.8	6.7	7.3	8.0	8.3	11.2	5.6
Employee	27.3	37.5	42.8	45.1	45.1	41.9	39.7	38.5	35.6	27.9	38.9
Family Worker	64.3	49.5	31.7	16.2	7.7	5.8	5.3	5.5	6.4	7.1	18.0
Seeking Work for the First Time	3.6	2.8	2.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Female	213,306	378,588	278,047	333,058	346,167	367,102	300,222	225,978	184,716	273,392	2,900,666
Own Account	5.6	12.3	17.6	23.8	28.6	35.1	35.8	38.9	37.6	37.7	27.0
Employer	0.8	0.9	1.4	2.1	2.7	3.0	4.0	4.8	5.7	7.7	3.1
Employee	31.0	40.0	40.6	36.3	37.0	33.8	32.8	32.9	34.1	33.4	35.6
Family Worker	58.3	44.8	38.2	36.0	31.7	28.1	27.5	23.4	22.6	21.2	33.4
Seeking Work for the First Time	4.3	2.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	9.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Population	514,016	953,659	767,983	915,271	976,041	1,073,842	879,388	679,349	537,406	819,513	8,116,468
Own Account	4.8	10.5	19.5	30.3	36.9	42.1	43.3	44.9	45.6	48.5	33.2
Employer	0.7	0.9	1.9	3.3	4.7	5.5	6.2	7.0	7.4	10.0	4.7
Employee	28.9	38.3	42.0	41.9	42.2	39.1	37.3	36.6	35.1	29.7	37.7
Family Worker	61.7	47.6	34.0	23.7	16.2	13.4	13.2	11.5	11.9	11.8	23.5
Seeking Work for the First Time	3.9	2.7	2.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source : 1971 Census Seri E. No. 11.

Table C.17   Assumptions on School Attendance and Implied Share of School Attending Population

	Male			Female		
	Population Attending School	Total Population	Percent Share of School-Attending Population	Population Attending School	Total Population	Percent Share of School-Attending Population
Age 10-14						
1971	788,440	1,380,806	57.1	624,421	1,295,481	48.2
1976	914,018	1,704,099	53.6	723,875	1,678,508	43.1
1981	1,059,597	1,530,602	69.2	839,170	1,521,339	55.2
1986	1,228,364	1,561,676	78.7	972,828	1,561,676	62.3
1991	1,424,010	1,670,825	85.2	1,127,774	1,670,825	67.5
Assumed Annual Growth Rate	3.00			3.00		
Age 15-19						
1971	254,744	1,027,192	24.8	132,450	1,033,466	13.3
1976	309,935	1,351,809	22.9	167,229	1,268,276	13.2
1981	377,083	1,668,313	22.6	203,460	1,643,259	12.4
1986	458,780	1,498,459	30.6	247,540	1,489,390	16.6
1991	558,175	1,578,880	36.5	301,170	1,528,880	20.0
Assumed Annual Growth Rate	4.00			4.00		
Age 20-24						
1971	48,863	610,792	8.0	14,539	726,956	2.0
1976	60,892	995,121	6.1	18,118	1,002,263	1.8
1981	75,882	1,312,921	5.8	28,050	1,232,142	2.3
1986	94,563	1,622,778	5.8	24,956	1,590,440	2.2
1991	117,844	1,456,491	8.1	43,561	1,448,613	3.0
Assumed Annual Growth Rate	4.50			4.50		

Source: 1971 Population Census Seri E. No.11, and the Study Team's Calculation

Table C.18   Assumed Percent Distribution by Types of Activities of the Population

	Male					Female				
	Ec. Active	Attending School	House-keeping	Others	Total	Ec. Active	Attending School	House-keeping	Others	Total
Age 10-14										
1971	21.8	57.1	6.0	15.2	100.0	16.5	48.2	17.0	18.2	100.0
1976	23.5	53.6	6.5	16.4	100.0	18.2	43.1	18.7	20.0	100.0
1981	15.6	69.2	4.3	10.9	100.0	14.3	55.2	14.7	15.8	100.0
1986	10.8	78.7	3.0	7.5	100.0	12.0	62.3	12.4	13.3	100.0
1991	7.5	85.2	2.1	5.2	100.0	10.4	67.5	10.7	11.4	100.0
Age 15-19										
1971	56.0	24.8	6.8	13.1	100.0	36.5	13.3	27.1	13.1	100.0
1976	57.4	22.9	6.2	13.4	100.0	36.6	13.2	27.1	13.1	100.0
1981	57.6	22.6	6.3	13.5	100.0	41.6	12.4	30.9	15.0	100.0
1986	51.7	30.6	5.6	12.1	100.0	39.6	16.6	29.4	14.3	100.0
1991	47.3	36.5	5.1	11.0	100.0	38.0	20.0	28.2	13.7	100.0
Age 20-24										
1971	80.2	8.0	3.9	7.8	100.0	38.2	2.0	53.8	5.8	100.0
1976	82.0	6.1	3.9	8.0	100.0	38.2	1.8	54.0	5.8	100.0
1981	82.2	5.8	4.0	8.0	100.0	38.1	2.3	53.7	5.7	100.0
1986	32.2	5.8	4.0	8.0	100.0	38.1	2.2	53.7	5.6	100.0
1991	80.2	8.1	3.9	7.8	100.0	37.8	3.0	53.5	5.7	100.0

Source: Study Team's Projection.

Table C.19   Projected Distribution of Population by Age and Types of Activity

	Male Total	Types of Activity Ec. Ac.	Attending School	House-keeping	Others	Female Total	Types of Activity Ec. Ac.	Attending School	House-keeping	Others
1971										
Age 10-14	1,380,806	301,016	788,440	82,848	209,883	1,245,481	213,754	624,422	220,232	235,778
15-19	1,027,192	575,228	254,744	62,569	134,562	1,033,466	377,215	137,451	280,069	135,584
20-24	610,792	489,855	48,863	23,820	47,641	726,756	277,697	14,539	391,102	42,163
25-29	626,544	582,686	5,637	15,037	23,808	857,021	332,524	1,714	494,501	28,282
30-34	658,907	529,915	0	13,178	15,814	809,061	346,278	0	438,511	24,271
35-39	734,582	706,668	0	11,018	16,895	794,694	367,149	0	403,705	23,840
40-44	606,543	579,249	0	12,131	16,377	607,821	300,264	0	282,029	25,528
45-49	481,133	453,227	0	8,660	17,245	460,246	225,981	0	209,412	24,853
50-54	383,049	352,788	0	8,810	21,068	402,843	184,905	0	173,525	44,313
55-	721,830	479,295	0	39,701	202,834	811,851	233,001	0	297,137	281,712
Total	7,231,438	5,049,927	1,097,686	277,772	708,127	7,799,440	2,858,768	778,126	3,190,323	866,324
1976										
Age 10-14	1,704,099	400,463	913,397	110,766	279,472	1,678,508	305,488	723,437	313,881	335,702
15-19	1,351,809	775,938	309,564	83,812	181,142	1,268,276	464,189	167,412	343,703	166,702
20-24	995,121	815,999	60,702	38,810	79,610	1,002,263	382,864	18,041	541,222	58,131
25-29	534,465	497,052	4,810	12,827	20,309	655,190	254,214	1,310	378,045	21,621
30-34	581,387	555,806	0	11,827	13,953	811,044	347,127	0	439,586	24,331
35-39	645,070	620,557	0	9,676	14,836	792,071	365,936	0	402,372	23,762
40-44	694,915	663,644	0	13,898	18,763	751,781	371,380	0	348,826	31,575
45-49	565,905	533,083	0	10,186	22,636	567,097	278,445	0	258,029	30,623
50-54	439,274	404,571	0	10,103	24,160	420,025	192,791	0	181,031	46,203
55-	835,739	554,931	0	45,965	234,843	918,733	263,676	0	336,256	318,800
Total	8,347,784	5,822,044	1,288,473	347,670	889,724	8,864,988	3,226,110	910,200	3,542,951	1,056,892
1981										
Age 10-14	1,530,602	238,774	1,059,177	65,815	166,836	1,521,339	217,551	839,779	223,637	240,372
15-19	1,668,313	960,948	377,039	105,104	225,222	1,643,259	683,596	203,764	507,767	246,489
20-24	1,312,921	1,079,221	76,149	52,517	105,034	1,232,142	469,446	28,339	661,660	70,232
25-29	910,723	846,972	8,197	21,857	34,607	924,715	358,789	1,849	533,560	30,515
30-34	491,241	469,626	0	9,825	11,790	613,431	262,548	0	332,480	18,403
35-39	569,109	547,483	0	8,537	13,090	794,012	366,834	0	403,358	23,820
40-44	610,236	582,775	0	12,205	16,476	749,299	370,154	0	347,675	31,471
45-49	648,356	610,751	0	11,670	25,934	701,412	344,393	0	319,142	37,876
50-54	516,671	475,854	0	11,883	28,417	517,760	237,652	0	223,155	56,754
55	999,974	663,982	0	54,998	280,992	1,017,339	291,976	0	372,346	353,017
Total	9,258,146	6,476,386	1,520,562	354,411	908,398	9,714,706	3,602,939	1,073,731	3,924,780	1,109,149
1986										
Age 10-14	1,561,676	168,661	1,229,039	46,850	117,126	1,561,676	187,401	972,914	193,648	267,703
15-19	1,498,459	774,703	458,528	83,914	181,314	1,489,390	589,798	297,239	437,881	212,983
20-24	1,622,778	1,333,924	94,121	64,911	129,822	1,590,440	605,958	34,990	854,066	89,065
25-29	1,221,850	1,136,321	10,776	29,324	46,430	1,149,767	446,110	22,995	663,416	37,942
30-34	859,598	821,776	0	17,192	20,630	877,296	375,483	0	475,494	26,319
35-39	480,925	462,650	0	7,214	11,061	600,549	277,454	0	305,080	18,016
40-44	538,377	514,150	0	10,768	14,536	751,135	371,061	0	348,527	31,548
45-49	569,350	536,328	0	10,248	22,774	699,096	343,256	0	318,089	37,751
50-54	591,940	545,177	0	13,615	32,557	640,389	293,940	0	276,008	70,443
55-	1,202,212	798,269	0	66,122	337,822	1,218,568	349,729	0	445,996	422,843
Total	10,147,174	7,091,959	1,792,684	350,157	914,072	10,578,366	3,840,190	1,328,148	4,318,205	1,214,613
1991										
Age 10-14	1,670,825	125,321	1,423,543	35,087	86,883	1,670,825	173,766	1,127,807	178,778	190,474
15-19	1,528,880	723,160	558,041	77,973	168,177	1,528,880	580,974	305,776	431,144	209,457
20-24	1,456,491	1,168,106	117,976	56,803	113,606	1,448,613	547,576	43,458	775,008	82,571
25-29	1,525,200	1,418,436	13,727	36,605	57,958	1,500,541	582,209	3,001	865,812	49,518
30-34	1,164,191	1,112,961	0	23,284	27,941	1,097,622	469,782	0	469,782	32,929
35-39	841,546	809,567	0	12,623	19,356	858,873	396,799	0	436,307	25,766
40-44	454,955	434,482	0	9,099	12,284	568,119	280,651	0	263,607	23,861
45-49	502,305	473,171	0	9,041	20,092	700,809	344,097	0	318,868	37,844
50-54	519,817	478,751	0	11,956	28,589	638,275	292,968	0	275.097	70,210
55-	1,411,208	937,042	0	77,616	396,549	2,904,516	833,596	0	1,063,052	1,007,867
Total	11,075,418	7,681,003	2,113,287	350,087	931,435	11,464,815	4,502,418	1,480,042	5,077,455	1,730,497

Source: Study Team's Projection.

Table C.20   Economically Active Population by Industry

and Employment Status, 1971

(Unit: Thousand Persons)

	Own Account	Employer	Employee	Unpaid Family Worker	Seeking Work	Total
Agriculture & Fishery	1,671	291	1,556	1,577	0	5,095
Manufacturing, Mining, Utilities & Construction	191	36	599	127	0	953
Trade, Services and Others	830	58	907	271	73	2,069
Total	2,692	385	3,062	1,975	73	8,117

Source: 1971 Census Seri E. No.11.

APPENDIX D

ESTIMATION OF THE 1973 GRDP BY KABUPATEN/KOTAMADYA

APPENDIX D

ESTIMATION OF THE 1973 GRDP BY KABUPATEN/KOTAMADYA

D.1 Introduction

D.001   As is mentioned in Chapters XII and XIII, there are always two
economic situations, "real" and "desired" ones, and planning is a measure
to close the gap between the two. So knowing the present "real" economic
situations is a very important step for planning. One of the major
indicators for general economic situations is Gross Regional Domestic
Product (GRDP) which is defined as the value of the gross output of goods
and services produced in the region less the value of the intermediate
goods and services. Estimation of kabuapten and kotamadya GRDPs has
been made in this study for 1973 based on the Kantor Sensus and Statistik
data on the GRDP of Central Java.

D.2 Basic Method

D.002   The available GRDP statistics of Central Java by sector is
shown in column 2 in Table D.1 at 1973 current market prices. We broke
down these figures into subsectors as shown in the fourth column of the
same table, taking into account GRDP growth rates and the 1971 GRDPs by
subsector.

D.003   Other statistics which will determine kabupaten and kotamadya
GRDPs are mainly the 1973 agricultural production and the 1971 number of
the employed labor force by sector by kabupaten and kotamadya. There
are two basic methods which are applied for our kabupaten and kotamadya
income estimation. One of them which is applied for the agricultural
sector calculates value added from prices and quantities of products
produced by kabupaten and kotamadya in the year. Then, the value added
is used as an allocator of GRDP in the sector. For the sectors except
the agricultural sector, some allocators which include numbers of employed
persons and quantities of cargoes transported are used to divide Provincial
sectoral GRDPs into regency subsectoral GRDPs. So our estimation is
based on the following assumptions:

Table D.1 Gross Regional Domestic Products by Sector in 1973

(Unit: Rp. Billion at the 1973 Price)

Sector (1)	GRDP (Rp Bil.) (2)	Sector & Sub-sector (3)	GRDP (Rp Bil.) (4)
Agriculture	344.2	Agriculture	344.2
		Farm Food Crops	(269.7)
		Farm Non-Food Crops	(30.7)
		Estate Crops	(21.2)
		Animal Husbandry	(11.8)
		Forestry & Hunting	(5.7)
		Fishery	(5.1)
Industry & Mining	98.5	Industry & Mining	98.5
		Mining & Quarrying	7.8
		Manufacturing	90.7
		Large & Medium	(63.4)
		Small & Household	(27.3)
Construction, Electricity Gas & Water	17.7	Construction, Electricity, Gas & Water	17.7
		Construction	14.5
		Electricity, Gas & Water	3.2
Transport & Communication	16.6	Transport & Communication	16.6
		Land	(11.3)
		Air	(1.8)
		Sea & River	(2.3)
		Communication	(1.2)
Trade & Banking	161.5	Trade and Banking	161.5
		Trade	148.4
		Banking & Other Financial Services	13.1
Public Administration, Services & Rents	68.4	Public Administration, Services & Rents	68.4
Total	706.9	Total	706.9

Sources: 1) GRDP; Kantor Sensus dan Statistik in Central Java.

2) To btain sub-sector GRDPs, the 1971 sub-sector GRDPs and their growth rates during the 1960s were used. The source of those figures is IBRD, A Framework for Regional Planning in Indonesia, Vol II, Washington, D.C., August 15, 1974, Table 16.

(1) For agricultural products, all regencies produce the same quality of products and there will be no price difference due to quality differences. Also, all regencies receive the same price for a particular product and there will be no price difference due to the different distances from markets.

(2) The GRDPs which are generated from vegetables and fruits are proportional to food crop production by kabupaten and kotamadya.

(3) Labor productivity per worker by sector is the same in every regency.

D.004   Due to the above method which uses allocators, there is a tendency of GRDPs by regency to regress towards a mean value. Take numbers of employed workers, for instance, to investigate this tendency. The regency which has a higher labor productivity than a mean will receive a smaller GRDP allocation, while the regency which has a lower labor productivity than a mean will obtain a larger GRDP allocation than its real GRDP. So the gap between the former and the latter becomes smaller than the real gap. The same effect will result from other allocators, too.

D.3 Evaluation of the Estimates

D.005   The results of the estimation is shown in Table D.2 and will be analyzed briefly in the following paragraphs. The estimates obtained are generally consistent with the beliefs of Provincial government officials concerning spatial aspects of the Province and with our observations made during the field trips. However, the areas which are generally considered as minus areas produce higher per capita incomes than expected ones. These areas are kabupatens Purbalingga, Wonosobo, Sragen, Grobogan, Blora Rembang, Demak and Temanggung. Due to the assumptions we made, the present estimation contains some problems which create this inconsistency.

D.006   One of the sources which creates the inconsistency is year-to-year fluctuations of agricultural production. Table D.3 shows changes of paddy planted areas and productions, value added per worker of the agricultural sector in 1973 and ratios of the 1973 paddy production to the avarage of the 1972-1974 rice production. As the ratios show, kabupatens Cilacap, Boyoladi, Jepara and Demak had an extremely good year, while Pati, Klaten, Wonosobo and Purbalingga had a worse than average year. So the year-to-year fluctuations change the economic status of kabupatens and kotamadyas in a particular year.

D.007   The second source of the inconsistency is the difference between the market economy and the non-market economy. Some products are mainly consumed at farms and seldom marketed. So they do not increase

Table D.2 Estimated Gross Regional Domestic Product by KB/KDY and by Sector, Central Java, 1973

(Unit: Rp. Million at Current Market Prices)

	Agriculture, Animal Husbandry, Forestry & Fishery							Mining & Quarrying	Manufacturing			Con-struction
	Sub-total	Farm Food Crops	Farm Non-food Crops	Estate Crops	Animal Husbandry	Forestry	Fishery		Sub-total	Large & Medium	Small & Household	
1. KDY Magelang	3.38				2.36		1.02	–	968.12	602.30	365.82	131.95
2. KDY Surakarta	33.10				25.96		7.14	150.54	7,315.50	5,382.66	1,932.84	575.65
3. KDY Salatiga	9.12				7.08		2.04	10.92	673.64	526.22	147.42	97.15
4. KDY Semarang	59.27				27.14		32.13	516.36	7,561.71	6,428.76	1,132.95	1,374.60
5. KDY Pekalongan	77.46				67.26		10.20	20.28	3,863.28	2,814.96	1,048.32	85.55
6. KDY Tegal	12.56				2.36		10.20	132.60	1,439.67	951.00	488.67	117.45
7. KB Cilacap	23,115.13	16,182.00	2,136.72	4,112.80	273.76	16.13	393.72	279.24	2,487.33	2,244.36	242.97	397.30
8. KB Banyumas	13,487.59	10,518.30	1,783.67	742.00	338.66	49.88	55.08	68.64	1,427.87	944.66	483.21	796.05
9. KB Purbalingga	7,904.74	6,742.50	963.98		175.82		22.44	59.28	1,497.41	1,248.98	248.43	134.85
10. KB Banjarnegara	7,767.30	6,472.80	1,031.52		184.08	3.42	75.48	–	441.54	152.16	289.38	118.90
11. KB Kebumen	14,995.05	12,675.90	1,869.63		379.96	14.48	55.08	5.46	1,599.66	1,179.24	420.42	616.25
12. KB Purworejo	11,795.31	9,709.20	1,848.14	508.80	205.32	11.74	20.91	3,648.84	1,174.34	868.58	305.76	435.00
13. KB Wonosobo	9,271.53	7,551.60	822.76		296.18	8.55	83.64	–	1,202.97	779.82	423.15	205.90
14. KB Magelang	11,843.64	10,248.60	1,120.55		454.30	2.85	17.34	0.78	1,277.09	1,077.80	199.29	419.05
15. KB Boyolali	11,121.54	8,900.10	1,304.75		859.04	52.55	5.10	5.46	1,779.13	367.72	1,411.41	171.10
16. KB Klaten	12,808.61	11,597.10	635.49		554.60		21.42	57.72	9,161.52	5,268.54	3,892.98	1,358.65
17. KB Sukoharjo	9,357.31	8,091.00	500.41	445.20	311.52		9.18	5.46	2,548.66	1,014.40	1,534.26	643.80
18. KB Wonogiri	12,360.47	9,709.20	1,814.37		826.00	3.25	7.65	166.92	654.80	469.16	185.64	208.80
19. KB Karanganyar	10,401.50	7,281.90	426.73	2,268.40	383.50	0.17	40.80	53.04	2,212.25	1,914.68	297.57	498.80
20. KB Sragen	12,641.76	11,597.10	429.80		594.72	3.31	16.83	59.28	772.46	412.10	360.36	374.10
21. KB Grobogan	18,601.85	16,451.70	733.73		488.52	917.19	10.71	–	464.62	82.42	382.20	453.85
22. KB Blora	14,618.51	10,248.60	432.87		922.76	2,995.41	18.87	2,213.64	289.90	82.42	207.48	310.30
23. KB Rembang	7,584.45	5,394.00	617.07		656.08	626.09	291.21	–	704.95	297.98	406.77	101.50
24. KB Pati	18,892.77	13,754.70	1,160.46	2,650.00	548.70	294.92	483.99	5.46	2,289.18	1,426.50	862.68	210.25
25. KB Kudus	4,569.18	3,236.40	1,132.83		139.24	42.35	18.36	74.88	12,751.53	11,602.20	1,149.33	835.20
26. KB Jepara	9,769.99	7,821.30	1,258.70		305.62	106.42	277.95	–	2,706.13	1,775.20	930.93	281.30
27. KB Demak	10,937.50	9,709.20	770.57		143.96	21.03	292.74	5.46	981.61	443.80	537.81	153.85
28. KB Semarang	13,283.55	9,709.20	905.65	1,823.20	599.44	21.15	224.91	108.42	1,010.90	792.50	218.40	236.35
29. KB Temanggung	8,939.19	5,933.40	2,419.16	212.00	346.92	0.68	27.03	–	564.82	253.60	311.22	189.95
30. KB Kendal	15,590.54	8,360.70	2,244.17	3,922.00	246.62	353.97	463.08	–	4,449.59	3,911.78	537.81	256.65
31. KB Batang	9,489.37	5,933.40	380.68	2,544.00	217.12	85.22	328.95	–	2,334.82	1,204.60	1,130.22	458.20
32. KB Pekalongan	8,062.55	5,394.00	282.44	1,505.20	160.48	3.88	716.55	–	6,104.93	3,131.96	2,972.97	524.45
33. KB Pemalang	9,380.10	7,821.30	690.75	275.60	264.32	24.68	303.45	87.36	1,510.24	653.02	857.22	571.32
34. KB Tegal	9,722.36	8,630.40	481.99		278.48	17.84	313.65	54.60	3,524.71	2,440.90	1,083.81	658.30
35. KB Brebes	15,692.45	14,024.40	500.41	191.00	512.12	22.86	441.66	9.36	956.05	653.02	303.03	488.65
Total	344,200.73	269,700.00	30,700.00	21,200.20	11,800.00	5,700.02	5,100.51	7,800.00	90,702.73	63,400.00	27,302.73	14,501.00

(continued)

Table D.2 (continued)

	Electricity Gas & Water Supply	Transportation & Communication					Trade Restaurants and Hotels	Banking & Other Financial Intermediaries	Public Administration Ownership of Dwelling & Services	Gross Regional Domestic Product	Population (in 1,000)	GRDP per Capita (Rp.)
		Sub-total	Land Transport	Air Transport	Sea Transport	Communication						
1. KDY Magelang	40.64	262.41	213.57			48.84	1,261.40	378.59	1,417.95	4,464.44	111,020	40,212.9
2. KDY Surakarta	154.56	1,072.64	845.24			227.40	5,342.40	1,423.97	3,559.30	20,027.66	464,395	43,126.3
3. KDY Salatiga	70.72	78.88	63.28			15.60	1,127.84	280.34	685.00	3,033.61	67,097	45,212.3
4. KDY Semarang	629.44	4,900.33	1,880.32	1,800	983.25	236.76	8,162.00	3,974.54	7,391.15	34,569.40	692,060	49,951.4
5. KDY Pekalongan	38.72	402.31	329.96		2.99	69.36	1,142.68	239.73	822.00	6,692.01	111,007	60,284.6
6. KDY Tegal	129.92	434.37	247.47		48.30	138.60	1,083.32	242.35	774.05	4,366.29	107,689	40,545.4
7. KB Cilacap	138.56	1,658.97	383.07		1,265.46	10.44	5,832.12	694.30	2,349.55	36,952.50	1,217,335	30,355.2
8. KB Banyumas	117.76	665.46	616.98			48.48	9,987.32	741.46	3,671.60	30,963.68	1,081,934	28,618.7
9. KB Purbalingga	36.16	142.31	129.95			12.36	5,505.64	64.19	1,630.30	16,974.88	602,776	28,161.2
10. KB Banjarnegara	75.20	46.48	36.16			10.32	3,235.12	41.92	1,143.95	12,870.41	609,820	21,105.3
11. KB Kebumen	173.76	367.27	337.87			29.40	4,867.52	231.87	2,479.70	25,336.54	953,197	26,580.6
12. KB Purworejo	44.48	220.92	203.40			17.52	3,799.04	242.35	1,664.55	23,024.83	667,842	34,476.5
13. KB Wonosobo	69.44	129.35	116.39			12.96	2,878.96	43.23	1,246.70	15,048.08	530,306	28,376.2
14. KB Magelang	34.24	202.95	193.23			9.72	4,259.08	222.70	2,068.70	20,328.23	842,104	24,139.8
15. KB Boyolali	3.20	41.34	33.90			7.44	4,036.48	125.76	1,753.60	19,037.61	726,746	26,195.7
16. KB Klaten	255.04	448.18	422.62			25.56	8,829.80	425.75	3,472.95	36,818.22	1,015,895	36,242.2
17. KB Sukoharjo	11.52	421.36	415.84			5.52	5,223.68	290.82	1,082.30	19,584.91	517,024	37,880.1
18. KB Wonogiri	120.96	141.28	131.08			10.20	2,760.24	61.57	1,376.85	17,851.89	921,190	19,379.2
19. KB Karanganyar	-	87.57	77.97			9.60	1,498.84	142.79	979.55	15,874.34	523,205	30,340.6
20. KB Sragen	226.56	85.48	76.84			8.64	3,175.76	82.53	1,842.65	19,260.58	672,034	28,658.6
21. KB Grobogan	43.84	171.04	158.20			12.84	4,689.44	60.26	2,267.35	26,752.25	910,187	29,392.0
22. KB Blora	109.44	278.98	246.34			32.64	3,279.64	125.76	1,465.90	22,692.07	625,852	36,257.9
23. KB Rembang	-	256.12	239.56			16.56	2,329.88	60.26	993.25	12,030.21	380,194	31,642.3
24. KB Pati	97.92	370.94	350.30			20.64	5,654.04	282.96	2,383.80	30,187.32	862,810	34,987.2
25. KB Kudus	97.92	454.58	404.54			50.04	4,303.60	353.70	1,746.75	25,187.73	457,606	55,041.5
26. KB Jepara	31.04	233.05	222.61			10.44	3,160.92	189.95	1,445.35	17,817.73	604,641	29,468.3
27. KB Demak	75.84	280.20	271.20			9.00	3,249.96		1,246.70	17,952.44	605,852	29,631.7
28. KB Semarang	30.40	68.72	58.76			9.96	3,012.52	1,011.32	2,048.15	19,840.93	691,920	28,675.2
29. KB Temanggung	31.68	121.80	108.48			13.32	3,071.88	41.92	1,534.40	14,506.12	483,736	29,987.7
30. KB Kendal	-	359.91	342.39			17.52	4,348.12	52.40	1,959.10	26,980.94	669,252	40,315.0
31. KB Batang	-	299.51	292.67			6.84	2,315.04	17.03	1,006.95	16,007.38	473,121	33,833.6
32. KB Pekalongan	95.36	288.16	280.24			7.92	4,095.84	103.49	1,376.85	20,548.14	570,445	36,021.2
33. KB Pemalang	46.40	413.06	404.54			8.52	5,090.12	-	1,972.80	19,218.10	819,345	23,455.4
34. KB Tegal	98.56	707.11	690.43			16.68	8,280.72	146.72	2,479.70	25,911.20	899,073	28,819.9
35. KB Brebes	70.72	486.96	474.60			12.36	7,509.04	385.14	2,760.55	28,292.11	1,025,797	26,056.5
Total	3,200.00	16,600.00	11,300.00	1,800.00	2,300.00	1,200.00	148,400.00	13,100.00	68,500.00	707,004.78	22,574,509	313,187.0

Note: Major data related to the estimation is also shown on Table D.4 to Table D.6 and sources of these datas are indicated on Table D.7.

Sources: As in Table D.7.

D-5

Table D.3   Paddy Planted Areas, Production & Their Change

			Planted Area		Production		Value Added per Worker in Agriculture (Rp. Mil./Worker)	(Production in 1973)/ (Annual Ave. Prod. of 3 years)
			Change[1] 1970-1974	Growth Rate (%)	Change[2] 1970-1974	Growth Rate (%)		
1.	KDY	Magelang	--	--	--	--	0.003	--
2.	KDY	Surakarta	-	--	-	-	0.016	--
3.	KDY	Salatiga	--	--	-.	--	0.004	-
4.	KDY	Semarang	--	--	-	--	0.007	-
5.	KDY	Pekalongan	--	--	-	-	0.061	-.
6.	KDY	Tegal	--	-	-	--	0.005	--
7.	KB	Cilacap	0.0560	1.37	-0.0097	-0.24	0.064	1.810
8.	KB	Banyumas	0.1007	2.43	0.1124	2.70	0.068	1.091
9.	KB	Purobalingga	0.0604	1.48	-0.0453	-1.11	0.063	0.516
10.	KB	Banjarnegara	-0.1968	-4.59	-0.0998	-2.41	0.042	0.986
11.	KB	Kebumen	0.0564	1.38	0.2012	4.69	0.075	1,015
12.	KB	Purworejo	-0.0062	-0.15	0.0796	1.93	0.074	1.067
13.	KB	Wonosobo	0.1039	2.50	0.1267	3.03	0.053	0.758
14.	KB	Magelang	0.5514	11.60	0.7930	15.72	0.040	0.950
15.	KB	Boyolali	0.0830	2.01	-0.0629	-1.54	0.058	1.442
16.	KB	Klaten	0.0069	0.17	0.5187	11.01	0.081	0.630
17.	KB	Sukoharjo	0.2347	5.41	0.2195	5.09	0.100	0.913
18.	KB	Wonogiri	0.2045	4.76	0.4517	9.77	0.044	0.927
19.	KB	Karanganyar	0.0569	1.39	0.1887	4.42	0.098	0.990
20.	KB	Sragen	-0.1784	-4.19	-0.0194	-0.48	0.108	1.084
21.	KB	Crobogan	0.0925	2.24	0.2363	5.45	0.076	1.075
22.	KB	Blora	0.0989	2.39	0.3539	7.87	0.088	1.163
23.	KB	Rembang	0.0872	2.11	0.0477	1.17	0.072	1.048
24.	KB	Pati	-0.1351	-3.22	0.4997	10.66	0.101	0.585
25.	KB	Kudus	0.0524	1.29	0.1102	2.65	0.067	0.954
26.	KB	Jepara	0.2529	5.80	0.0612	1.50	0.071	1.646
27.	KB	Demak	0.1225	2.93	0.0364	0.90	0.068	1.217
28.	KB	Semarang	0.0075	0.19	-0.0874	-2.12	0.073	1.091
29.	KB	Temanggung	0.1827	4.28	0.2295	5.30	0.077	0.992
30.	KB	Kendal	-0.0027	-0.07	-0.0128	-0.32	0.079	0.971
31.	KB	Batang	-0.1063	-2.56	-0.2584	-5.91	0.076	1.024
32.	KB	Pekalongan	-0.1038	-2.50	-0.1188	-2.85	0.087	1.020
33.	KB	Pemalang	-0.0870	-2.11	-0.1279	-3.05	0.050	1.033
34.	KB	Tegal	-0.0784	-1.90	-0.0341	-0.84	0.050	0.959
35.	KB	Brebes	0.0281	0.70	0.0966	2.33	0.058	1.103
Central Java			0.0506	1.24	0.0990	2.39	0.068	1.0339

Note: 1/ Change is defined as follows: $\dfrac{(1974\ planted\ area)-(1970\ planted\ area)}{(1970\ planted\ area)}$

   2/ Same way as the note 1/.

Source: BAPPEDA dan Kantor Sensus & Statistik, Jawa Tengah Dalam Angka 1973-1975, Semarang, January 31, 1977, p. 140.

cash incomes of farmers, but raise the welfare of the farm family. In this case, our estimates of kabupaten GRDPs are generally higher than the cash per capita incomes which people observe, and the kabupatens which produce those products are regarded as poorer kabupatens than what they really are. One of products in this category seems to be coconuts and the kabupatens which are main coconut producers are Cilacap, Banyumas, Purbalingga, Kebumen, Purworejo, Wonogiri and Jepara. So their GRDP estimates are likely to be higher than what the Governmental officials generally observe.

D.008   The third source of inconsistency may be the forestry and estate crop subsectors. A large part of forestry products are from kabupatens Blora, Grobogan and Remban, while major kabupatens producing estate crops are Cilacap, Karanganyar, Pati, Kendal and Batang. However, the entire income induced from these products may not increase per capita income of the people in those kabupatens since a large part of the income from the forestry and estate crops subsectors becomes either the Central or the Provincial Government revenues. So our estimates of per capita incomes in those kabupatens may be higher than their real per capita incomes.

D.009   The last source of the inconsistency is our estimation method which assumes value added per worker being equal in every regency for all sectors except the agricultural sector. But, in reality, value added in wealthy areas is generally higher than that of poor areas. Due to this fact, our calculations of per capita incomes underestimate GRDPs in wealthy areas and overestimate GRDPs in poor areas.

D.010   Despite these shortcomings, our estimates provide a relatively reliable picture of the spatial situation of development in the Province. This is partly because there are ample data for calculating the kabupatens and kotamadyas GRDPs in the agricultural sector which is the largest sector in the Provincial economy and partly because there are differences in the sectoral compositions from regency to regency which reflect generally kabupaten and kotamadya economic situations. These two factors provide a fairly accurate picture of the relative levels of development for different areas within the Province. For this estimation, methods, important statistics, economic active population by sector and by KB/KDY and their data sources are presented in Tables D.4 to D.7.

Table D.4   Methods, Assumptions and Data Employed for Estimating KB/KDY GRDP in 1973

Sector/Sub-Sector	Allocator	Methods and Assumption	Data and Data Sources
Farm Food Crops	Value added (VA) from the production of six major food crops—paddy, maize, cassava sweet potatoes, peanuts and soybeans—in 1973.	1. VA here is defined as total value of a product minus production costs (only purchased seeds, insecticides, fertilizer and irrigation costs). VA from the production of each crop was calculated for each KB/KDY by the following formula: $$VA = \left(\frac{\text{value of production/ha} - \text{production costs/ha}}{\text{yield in ton/ha}}\right) \times$$ (production in tons) Then, VA for all the crops were added up to produce sub-sectoral VA for each KB/KDY. 2. Separate calculation was made for wet land and dry land rice.	Paddy and upland rice: *Jawa Tengah Dalam Angka 1973-1975.* Other products: *Laporan Tahunan 1973.* Value added per kg: *Survey Pertanian January-April 1973.*
Farm Non-Food Crops	Total value of non-food crop production in 1974 which is under the authorization of Dinas Perkebunan.	Value of production by crop and by KB/KDY was calculated for 10 crops—sugar cane, cloves, coffee, pepper, tea, kapok, tobacco, coconut, rubber and vanila—and added up to give sub-sectoral total value for each KB/KDY.	1974 production and prices data were obtained from Dinas Perkebunan, Central Java.
Estate Crops	Total value of estate crop production in 1974 which is under the authorization of Directorat Jenderal Perkebunan, Inspectorat Perkebunan Besar Daerah VII, Semarang.	Value of production by crop and by KB/KDY was calculated for 4 crops—rubber, tea, coffee and kapok—and added up to produce sub-sectoral value for each KB/KDY.	1974 production data: *Statistik Perkebunan Besar Di Daerah: Jawa Tengah dan D. Ist. Yogyakarta.* 1974 price data were obtained from Dinas Perkebunan, Central Java.
Animal Husbandry	Total numbers of cow equivalent livestock in 1973.	Animals except cows are converted into cow equivalent figures and then all animals are summed up. The animals included are cows, buffalos, horses, goats, hogs, sheep, chickens and ducks. The number of animals which equal to one cow is 1 buffalo, 2 horses, 15 goats, 15 sheep, 5 hogs, 500 chickens or 335 ducks.	1974 livestock data were obtained from Dinas Peternakan.
Forestry	Total value of teak and rimba wood production in 1974.	Value of production by wood and by KB/KDY was calculated for two wood products—teak and rimba—and added up to produce sub-sectoral value for each KB/KDY.	1974 production and prices data were obtained from Permutani, Jawa Tengah.
Fishery	Total value of sea, brackish pond, fresh water, pond and rice field fish production in 1973.	Value of production by fishery type and by KB/KDY was calculated and added up to produce sub-sectoral value for each KB/KDY.	1973 quantities produced and values data were obtained from Dinas Perikanan, Jawa Tengah.

(continued)

Table D.4 (continued)

Sector/Sub-Sector	Allocator	Methods and Assumption	Data and Data Sources
Mining and Quarrying	Number of mining workers in 1971.	GRDP of this sector is allocated to KB/KDY in proportion to numbers of employed workers.	Number of employed workers in 1971 is from Pentingnya Data Statistik bagi Dimpinan dan Perencanaan Pembangunan Daerah.
Large- and Medium-Scale Manufacturing	Number of workers employed in this sub-sector in 1971.	GRDP of this sub-sector is allocated to KB/KDY in proportion to numbers of employed workers in this sub-sector.	Ibid.
Small-Scale and Household Manufacturing	Number of workers employed in the small-scale manufacturing sector in 1971.	Same as the above.	Ibid.
Construction	Number of workers employed in this sector	Same as the above.	Ibid.
Electricity, Gas & Water	Number of workers employed in this sector in 1971.	Same as the above.	Ibid.
Land Transport	Number of workers employed in this sub-sector in 1971.	Same as the above.	Ibid.
Air Transport	GRDP of this sub-sector is allocated to KDY Semarang.	—	—
Sea & River Transport	Tons of cargoes handled at major port in 1973.	GRDP of this sub-sector is allocated to KDYs Semarang, Pekalongan, Tegal and KB Cilacap in proportion to cargoes handled.	Volume of cargoes handled in 1973 is from Cargo Loading and Unloading at Ports, Indonesia 1970-74.
Communication	Number of telephones in 1973.	GRDP of this sub-sector is allocated to KB/KDY in proportion to numbers of telephones.	Number of telephone is obtained from Statistik Potensi Desa Jawa Tengah 1973.
Trade, Restaurant & Hotel	Number of workers employed in this sector in 1973.	GRDP of this sector is allocated to KB/KDY in proportion to numbers of employed workers in this sector.	Number of workers employed in this sector is obtained from Pentingnya Data Statistik bagi Dimpinan Dan Perencanaan Pembangunaan Daerah.
Banking & Other Financial Services	Number of workers employed in this sector in 1973.	Same as the above.	Ibid.
Public Administration, Ownership of Dwelling & Services	Number of Workers employed in this sector in 1973.	Same as the above.	Ibid.

Table D.5 Selected Statistics for Kabupaten/Kotamadya Central Java, 1973

(1)	Area (km²)[1] 1973 (2)	Population[1] 1973 (3)	Population[1] Density 1973 (per km²) (4)	Arable Land[1] 1973 (ha) (5)	Irrigated[1] Areas 1973 (ha) (6)	Paddy[2] Harvested 1973 (ha) (7)	Agricultural Products, 1973		
							Paddy[3] (ton) (8)	Upland Rice[3] (ton) (9)	Mrize[2] (ton) (10)
1. KDY Magelang	18.21	111,020	6,126	959	547	-	-	-	na
2. KDY Surakarta	43.51	464,395	10,673	3,758	252	-	-	-	na
3. KDY Salatiga	16.61	67,097	4,039	1,648	182	-	-	-	na
4. KDY Semarang	99.40	692,060	6,962	8,421	536	2,169	-	-	822
5. KDY Pekalongan	16.61	111,007	6,681	1,381	357	-	-	-	na
6. KDY Tegal	12.67	107,689	8,498	899	259	-	-	-	na
7. KB Cilacap	2,180.24	1,217,335	558	159,498	23,945	105,916	350,783	5,957	6,695
8. KB Banyumas	1,224.57	1,081,934	883	100,119	26,852	60,935	229,546	5,646	6,506
9. KB Purbalingga	715.88	602,776	842	60,802	15,346	32,689	126,771	2,222	24,304
10. KB Banjarnegara	1,059.02	609,820	575	87,586	13,023	21,757	99,656	190	32,924
11. KB Kebumen	1,276.99	953,197	746	111,295	24,966	58,617	234,886	11,993	9,068
12. KB Purworejo	1,039.06	667,842	642	93,539	27,981	46,543	187,761	1,519	6,154
13. KB Wonosobo	900.52	530,306	588	75,293	16,796	22,622	48,889	76	19,183
14. KB Magelang	1,099.00	842,104	766	99,979	34,273	43,948	181,991	1,290	36,798
15. KB Boyolali	1,005.05	726,746	723	79,697	13,183	27,050	114,967	17,823	45,541
16. KB Klaten	648.30	1,015,895	1,567	60,856	36,936	54,057	265,169	1,519	5,646
17. KB Sukoharjo	453.93	517,024	1,138	42,851	18,545	31,545	160,156	3,727	7,040
18. KB Wonogiri	1,794.75	921,190	513	155,545	21,681	30,933	111,315	9,693	24,817
19. KB Karanganyar	741.63	523,205	705	61,360	22,665	29,385	132,916	2,186	9,293
20. KB Sragen	933.97	672,034	719	85,579	12,127	60,816	238,768	7,916	15,058
21. KB Grobogan	1,878.64	910,187	484	1,221,140	24,489	67,912	231,526	791	104,694
22. KB Blora	2,450.49	625,852	255	98,945	10,132	43,667	167,186	2,588	51,219
23. KB Rembang	968.01	380,194	392	70,475	10,305	30,763	84,724	1,833	20,963
24. KB Pati	1,597.89	862,810	539	135,238	38,909	63,272	272,855	4,711	16,215
25. KB Kudus	445.80	457,606	1,026	41,962	12,968	15,477	60,947	1,667	6,798
26. KB Jepara	967.02	604,641	625	79,618	22,689	28,778	104,995	13,716	12,986
27. KB Demak	1,046.80	605,853	578	97,967	27,492	68,320	207,109	456	22,311
28. KB Semarang	1,023.91	691,920	675	95,637	19,711	36,894	157,120	3,251	49,405
29. KB Temanggung	778.24	483,736	621	71,746	17,184	28,156	113,628	-	29,334
30. KB Kendal	932.48	669,253	717	79,067	31,772	40,269	153,117	2,024	22,146
31. KB Batang	700.89	473,121	675	56,265	19,575	27,875	96,479	427	25,256
32. KB Pekalongan	817.84	570,445	697	58,101	24,177	30,181	110,930	4,415	8,032
33. KB Pemalang	977.78	819,345	837	75,024	31,389	48,112	176,085	2,249	10,800
34. KB Tegal	861.11	899,073	1,044	67,914	36,067	37,609	162,471	28	31,576
35. KB Brebes	1,566.28	1,085,797	693	106,542	50,376	67,125	269,057	454	46,054

(continued)

Table D.5 (continued)

		Agricultural Products, 1973					Manufacturing Industry 1974[3]			
							No. of Establishment		No. of Workers	
		Cassava[2] (ton)	Sweet Potatos[2] (ton)	Groundnut[2] (ton)	Soybean[2] (ton)	Green Bean[2] (ton)	Large & Medium	Small	Large & Medium	Small
		(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1.	KDY Magelang	na	na	na	na	na	32	118	1,608	884
2.	KDY Surakarta	na	na	na	na	na	221	528	14,323	4,661
3.	KDY Salatiga	na	na	na	na	na	4	51	1,394	358
4.	KDY Semarang	9,627	452	156	-	-	146	342	17,096	2,734
5.	KDY Pekalongan	na	na	na	na	na	150	241	7,495	2,528
6.	KDY Tegal	na	na	na	na	na	49	151	2,523	1,182
7.	KB Cilacap	94,532	7,200	1,632	1,794	8	35	97	5,975	584
8.	KB Banyumas	48,736	3,181	2,212	1,500	-	48	147	2,505	1,167
9.	KB Purbalingga	37,002	3,163	1,997	211	-	32	90	3,322	599
10.	KB Banjarnegara	60,347	6,189	1,707	632	109	8	101	411	700
11.	KB Kebumen	93,506	7,123	3,652	5,847	729	54	120	3,145	1,014
12.	KB Purworejo	112,737	2,716	1,876	1,336	-	31	93	2,304	740
13.	KB Wonosobo	73,449	14,726	75	258	-	21	144	2,076	1,023
14.	KB Magelang	89,510	18,813	566	174	-	13	65	2,872	481
15.	KB Boyolali	88,309	5,819	2,556	2,026	-	17	381	970	3,402
16.	KB Klaten	29,701	8,667	1,910	2,302	36	255	1,080	14,010	9,392
17.	KB Sukoharjo	51,620	2,291	1,479	4,743	248	49	465	2,690	3,699
18.	KB Wonogiri	188,136	1,785	2,828	5,635	-	5	72	1,250	446
19.	KB Karanganyar	72,526	14,878	1,789	849	-	13	110	5,099	715
20.	KB Sragen	68,542	2,492	2,718	111	-	10	150	1,104	868
21.	KB Grobogan	45,399	10,464	372	33,784	947	7	140	220	920
22.	KB Blora	49,058	13,342	2,310	6,513	605	6	70	213	500
23.	KB Rembang	53,711	8,761	691	879	263	10	140	790	983
24.	KB Pati	66,712	5,871	6,141	4,972	317	37	302	3,802	2,080
25.	KB Kudus	6,596	1,467	1,344	2,140	26	92	413	30,870	2,770
26.	KB Jepara	94,759	7,449	8,517	761	51	37	292	4,718	2,244
27.	KB Demak	21,636	5,858	944	4,963	837	7	210	1,180	1,298
28.	KB Semarang	81,315	13,273	699	254	-	9	80	2,101	530
29.	KB Temanggung	26,953	3,957	71	124	-	7	139	669	754
30.	KB Kendal	71,715	10,157	2,406	485	145	20	207	10,399	1,297
31.	KB Batang	57,354	11,046	1,194	1	714	22	409	3,211	2,730
32.	KB Pekalongan	21,364	7,355	678	558	-	133	803	8,338	7,172
33.	KB Pemalang	19,033	4,752	209	405	499	19	300	1,733	2,067
34.	KB Tegal	51,667	16,590	1,402	857	1,169	25	370	6,490	2,613
35.	KB Brebes	56,076	6,284	2,244	6,678	215	11	115	1,744	728

Notes and Sources:
1/ BAPPEDA & Kantor Sensus and Statistik, Statistik Potensi Desa, Jawa Tengah 1973, Semarang, March 1975.
2/ Dinas Pertanian Rakyat Propinsi Jawa Tengah, Laporan Tahunan 1973, Semarang, October 7, 1974.
3/ BAPPEDA & Kantor Sensus and Statistik, Jawa Tengah Dalam Angka 1973-1975, Semarang, January 31, 1977.

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Table D.6   Economic Active Population by KB/KDY and by Sector in 1971

(Unit: Persons)

			Agriculture	Mining & Quarrying	Manu-facturing	Electric, Gas & Water	Construction	Trade, Rest. & Hotels	Transport & Comm.	Financing & Insurance	Public ad. & Services	Not Defined	Total
1.	KDY	Magelang	1,001	0	3,530	63	1,107	8,595	2,479	350	15,795	1,067	33,987
2.	KDY	Surakarta	2,057	140	33,833	240	4,830	36,467	9,826	1,319	44,036	6,312	139,060
3.	KDY	Salatiga	2,052	10	3,132	110	821	7,694	740	260	7,610	2,280	24,709
4.	KDY	Semarang	8,273	480	29,316	979	11,530	55,678	21,849	3,677	82,193	10,748	224,723
5.	KDY	Pekalongan	1,280	20	19,492	60	719	7,774	3,840	222	9,136	2,588	45,131
6.	KDY	Tegal	2,709	123	7,806	202	989	7,327	2,881	224	8,612	1,092	31,965
7.	KB	Cilacap	360,900	260	22,502	215	3,339	39,674	4,446	643	26,158	4,449	462,586
8.	KB	Banyumas	197,264	64	41,620	183	6,690	67,941	7,168	687	40,920	4,676	367,213
9.	KB	Purbalingga	125,128	55	41,291	56	1,136	37,487	1,516	60	18,135	2,042	226,906
10.	KB	Banjarnegara	186,548	0	35,199	117	999	22,010	417	39	12,751	814	258,894
11.	KB	Kebumen	199,123	5	47,850	270	5,171	33,106	3,924	215	27,603	6,029	323,296
12.	KB	Purworejo	158,447	3,393	11,851	69	3,650	25,868	2,359	224	18,530	2,614	227,005
13.	KB	Wonosobo	173,301	0	7,377	108	1,723	19,588	1,347	40	13,861	1,418	218,763
14.	KB	Magelang	297,374	1	15,776	53	3,521	28,957	2,251	206	23,045	4,169	375,353
15.	KB	Boyolali	192,507	5	13,220	5	1,438	27,457	395	117	19,486	4,267	258,897
16.	KB	Klaten	158,408	54	58,757	396	11,401	60,056	4,913	394	38,645	7,215	340,239
17.	KB	Sukoharjo	93,110	5	27,994	18	5,409	35,545	4,838	269	12,047	3,524	182,756
18.	KB	Wonogiri	278,808	155	12,829	188	1,750	18,808	1,518	57	15,294	4,694	334,101
19.	KB	Karanganyar	105,653	49	17,734	0	4,183	10,191	912	132	10,899	12,109	161,862
20.	KB	Sragen	117,275	55	22,511	352	3,146	21,587	889	76	20,501	2,703	189,093
21.	KB	Grobogan	244,781	0	5,921	68	3,817	31,942	1,841	56	25,255	4,248	317,929
22.	KB	Blora	165,669	2,059	5,663	170	2,600	22,294	2,865	116	16,319	1,809	220,564
23.	KB	Rembang	104,902	0	16,036	0	852	15,842	2,781	56	11,067	2,507	154,043
24.	KB	Pati	186,248	5	30,228	152	1,771	38,486	4,066	262	26,562	12,468	300,248
25.	KB	Kudus	67,854	70	49,671	152	7,014	29,339	4,701	328	19,449	2,923	181,501
26.	KB	Jepara	138,316	0	30,391	48	2,364	21,510	2,587	176	16,046	5,114	216,552
27.	KB	Demak	159,776	5	13,499	118	1,377	32,083	3,148	936	13,837	5,378	220,157
28.	KB	Semarang	181,544	101	12,039	47	1,986	20,524	677	39	22,799	7,089	246,845
29.	KB	Temanggung	116,348	0	12,314	49	1,601	20,896	1,261	49	17,041	2,618	172,177
30.	KB	Kendal	198,081	0	11,586	0	2,160	29,564	3,977	16	21,788	2,486	269,658
31.	KB	Batang	124,467	0	14,018	0	3,848	15,713	3,402	96	11,215	3,079	175,838
32.	KB	Pekalongan	92,809	0	77,767	148	4,399	27,861	3,263	0	15,328	2,922	224,497
33.	KB	Pemalang	186,855	81	15,038	72	4,794	34,637	4,706	136	21,971	5,460	273,750
34.	KB	Tegal	193,649	51	29,500	153	5,527	56,409	8,025	357	27,624	5,395	326,690
35.	KB	Brebes	271,136	9	21,005	110	4,105	51,068	5,509	295	30,689	5,552	389,478
		Total	5,094,653	7,255	818,296	4,971	121,764	1,009,978	131,317	12,129	762,247	153,858	8,116,468

Source: Pikasti Jawa Tengah, Pertingnya Data Statistik bagi Dimpinan dan Pecencanaan Pernbaugunan Daerah, Semarang, April 1, 1976, p. 22.

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Table D.7   Sources of Data for Income Estimation by KB/KDY in Table D.2

1. 1973 Income   : From Kantor Sensus & Statistik, Central Java.

2. Agriculture   : Corn   : Dinas Pertanian Rakyat, Propinsi Jawa
                                             Tengah, Laporan Tahunan 1973, October
                                             7, 1974.
                          Cassava   : Ibid.
                          Sweet Potatoes: Ibid.
                          Peanuts   : Ibid.
                          Soybean   : Ibid.

3. Non-food Farm Crops: Dinas Estate, Central Java Province.

4. Estate Crops   : General Directorate of Estate, Statistik Perkebunan
                          Besar Di Daerah: Jawa Tengah & D. Ist. Yogyakarta 1974,
                          Semarang, April, 1975, from several pages related to
                          Central Java.

5. Livestock   : Dinas Livestock, Central Java Province.

6. Fishery Data   : Dinas Fishery, Central Java Province.

7. Forestry Data   : Government Enterprise of Forestry, Central Java Province.

8. Rice   : BAPPEDA dan Kantor Sensus & Statistik, Jawa Tengah Dalam
                          Angka 1973-1975, Semarang, January 31, 1977, p. 140.

9. Dry Land Rice   : Ibid., p. 140.

10. Air Transport   : Ibid., p. 303.

11. Communication   : Number of Telephone by KB/KDY: BAPPEDA dan Kantor
                          Sensus & Statistik, Statistik Potensi Desa Jawa
                          Tengah 1973, Semarang, May 24, 1975.

12. Population   : BAPPEDA dan Kantor Sensus & Statistik, Statistik
                          Potensi Desa, Jawa Tengah 1973, Propinsi Daerah
                          Tingkat I Jawa Tengah, Semarang, May 24, 1975, p. 7-8.

13. Agriculture Price   : Biro Pusat Statistik, Survey Pertanian, January-April
                          1973, Jakarta, January, 1975. From several pages
                          related to Central Java.

14. Sea Transport   : Central Bureau of Statistics, Cargo Loading and Unloading
                          at Ports, Indonesia 1970-74, Jakarta, 1975, p. 170-174.

15. Labor Force by Sector :
                          Pikasti Jawa Tengah, Pentingnya Data Statistik bagi
                          Dimpinan dan Perencanaan Pembangunan Daerah, Semarang,
                          April 1, 1976, p. 22. Angkatan Kerja Menurut
                          Kabupaten/Kotamadya dan Lapangan Pekerjaan Daerah
                          Tingkat I Jawa Tengah (Sensus Penduduk 1971). This
                          source has been used for the mining & quarrying,
                          construction, electricity, gas and water, trade, banking
                          and other financial and public administrative sectors,
                          and the land transportation sub-sector of the transpor-
                          tation and communication sector.

APPENDIX E

PROJECTION OF THE 1983 PROVINCIAL GROSS

REGIONAL DOMESTIC PRODUCT

APPENDIX E

PROJECTION OF THE 1983 PROVINCIAL GROSS REGIONAL DOMESTIC PRODUCT

E.001   To evaluate effects of each strategy, we projected the 1983
Gross Regional Domestic Product (GRDP) and per capita income in the
Province. The method used for the projection is summarized in the
following.

E.1 Capital Stock in 1983

E.002   We assume that 6.6 percent of the existing capital stock in
the present production systems will become physically too old and be
scrapped each year. So capital stock in a certain year can be expressed
as

$$K_t = 0.034 \ K_{t-1} + I_t \tag{1}$$

where

K_t = the amount of capital stock in year t, and

I_t = the amount of capital investment in year t.

Based on formula (1), the 1983 capital stock can be expressed in the
following formula.

$$K_{1983} = 0.664 \ K_{1977} + 0.8603 \sum_{i=1}^{6} I_{1977+i} \tag{2}$$

E.2 Returns to Capital

E.003   Returns to capital in year t can be expressed as

$$RK_t = IRR * K_t \tag{3}$$

Table E.1   Internal Rate of Return to Capital, Labor Contributions and Other Characteristics by District in Central Java, 1977 1/

(Unit)	Belt Areas (1)	Minus AReas (2)	Axes Areas (3)	The Rest (4)	Other Areas (5)=(3)+(4)	Province (6)
Population	9,819,523	5,871,186	3,522,175	4,936,281	8,458,456	24,149,165
GRDP (Rp. Mil.)	751,380	346,335	231,400	332,849	564,249	1,661,964
Per capita GRDP (Rp.)	76,519	58,989	65,698	67,429	133,127	68,821
Capital Stock (Rp. Mil.)	1,164,639	484,869	335,530	453,428	788,958	2,439,466
Returns to Capital (Rp. Mil.)	161,885	56,245	42,612	51,573	94,185	312,315
Labor Contribution (Rp. Mil.)	589,495	290,090	188,528	281,511	470,039	1,349,649
IRR	.139	.116	.127	.114	.119	.128
w	3.64	5.16	4.42	5.45	4.99	4.32

Notes: 1/ All figures are for 1977.
         All figures are estimated by members of the Study team.

Source: Estimated by the Study team.

where

$$RK_t = \text{returns to capital in year t, and}$$

$$IRR = \text{internal rate of returns to capital.}$$

As mentioned in Chapter XIV, it is assumed that the ratio of labor contributions to returns to capital is constant over time for purposes of our analysis.

$$RL_t = \omega * RK_t \qquad (4)$$

where

$$RL_t = \text{labor contributions to GRDP in year t, and}$$

$$\omega = \text{ratio of labor contributions to returns to capital.}$$

Adding formula (3) and (4) together, we can define GRDP in year t as follows:

$$GRDP_t = RK_t + RL_t \qquad (5)$$

E.3 Process of the GRDP Projection

E.004   In Table E.1, internal rates of returns to capital (IRR), labor contribution ratio (ω) and other characteristics by district in Central Java are summarized. Using IRR and ω in the table, let us try to project GRDP in three areas, the development belt area, the minus areas and the other areas. For this exercise, let us evaluate the Mixed Strategy which is a combination of Differential Growth Strategy and Minus Areas Strategy in Chapter XIV. In this strategy, per capita public investments in terms of the 1977 population are shown in Table E.2.

Table E.2   Per Capita and Total Public Investment
by District in Central Java

	(Unit: Rp. at 1977 Prices)	
District	Per Capita Public Investment (Rp.)	Total Public Investment (Rp. Mil.)
Belt Area	77,716	763,134
Minus Areas	64,479	378,568
Other Areas	47,225	399,450
Province	63,818	1,541,152

Source: Estimated by the Study team.

Table E.3　The 1983 GRDP Projection, Central Java [3]

(Unit: Rp. at the 1977 Price)

		Development Belt Areas	Minus Areas	Other Areas	Province
(1)	Population in 1977	9,819,523	5,871,186	8,458,456	24,149,165
(2)	Per Capita Pub. Inv. (Rp.) [2]	77,714	64,479	47,225	63,818
(3)	Pub. Inv. (Rp. Mil.) [1]	763,134	378,568	399,450	1,541,152
(4)	Priv. Inv. (Rp. Mil.) [1]	1,159,964	75,714	193,733	1,429,411
(5)	Total Inv. (3)+(4)	1,923,098	454,282	593,183	2,970,563
(6)	(5) * .8603	1,654,441	390,819	510,315	2,555,575
(7)	Capital Stock in 1977	1,164,639	484,869	788,958	2,438,466
(8)	(7) * .664	773,320	321,953	523,868	1,619,141
(9)	Capital Stock in 1983 (6)+(8)	2,427,761	712,772	1,034,183	4,174,716
(10)	(9) * IRR	337,459	82,682	123,067	543,208
(11)	(10) * w	1,228,250	426,319	614,108	2,268,777
(12)	GRDP (9)+(10)	1,565,809	509,319	737,175	2,812,303
(13)	Repulation in 1983	11,466,031	6,325,517	9,059,128	26,850,476
(14)	Per Capita GRDP (Rp.)	136,561	80,518	81,373	104,739

Notes:　1/　Figures of public and private investments are total figures from 1978 to 1983.

　　2/　The 1977 population figures are used for calculating per capita public investment in the second row.

　　3/　If there is no indication, figures indicate the 1983 figures.

The process of calculation is shown on Table E.3. The first row shows the 1977 ;opulation figures by district which are taken from Table E.1, whereas the second and third rows indicate the 1977 per capita and total public investment figures, respectively. On the fourth row, total private investment figures which are simple functions of the public investments are listed. These functions are:

District	Private Investment
Belt Areas	152 percent of public investment
Minus Areas	20 percent of public investment
Other Areas	48 percent of public investment

The fifth row is sums of the third and the fourth rows. On the seventh row, the present capital stocks by district which are taken from Table E.1 are listed. The sixth row indicates figures which equal to the second term on the right hand side of formula (2), whereas the eighth row shows figures which equal to the first term on the right hand side of the same formula. The sums of the first and the second terms of the formula are shown in the ninth row. The tenth row is returns to capital which are equivalent to formula (3), while the eleventh row is labor contributions which equal formula (4). The figures in the twelfth row, which are the sums of the tenth and the eleventh rows, are GRDPs by district in 1983.

E.005   Populations in 1983 by areas are estimated by utilizing the formula (6):

$$g_p = 1.584 + 0.01818 \, I_p \tag{6}$$

where

g_p = annual population growth rate from 1978 to 1983, and

I_p = private capital investment in a regency in billion Rupiahs from 1978 to 1983.

However, the estimation by means of the formula did not produce the same figure which was estimated by the provincial population growth rate. So population growth rates by district are adjusted by public investment figures. For this adjustment, no specific formula was used since any function was not available. So we did guess work to obtain adjusted population growth rates taking account of total public and private investments, the 1983 per capita income with non-adjusted population growth rates, and the past population growth rate in "Other Areas" in Table E.2.

	Population Growth Rate by Formula (6) (%)	Adjusted Population Growth Rate (%)
Belt Areas	2.13	2.62
Minus Areas	1.00	1.25
Other Areas	1.19	1.15
Province	1.53	1.78

E.006   The last row of Table E.3 shows per capita incomes by district. In this example, per capita income in Minus Areas is almost same as that in Other Areas. And the per capita incomes outside of Development Belt Areas are around 60 percent of the per capita income in Development Areas.

E.4 Application

E.007   This GRDP projection method can be applied easily by following the above mentioned process to either the Province as a whole or individual districts. The most important point for this method is to estimate IRR, ω and the coefficient of formula (1). So before following the projection process, great effort should be made at estimating those three coefficients.

APPENDIX F

PRESENT SITUATION OF EDUCATION

APPENDIX F

PRESENT SITUATION OF EDUCATION

F.1 Formal Education System in Indonesia and Central Java

F.1.1 Formal Education

F.001   The Indonesian education system comprises six years of primary
school (SD: Sekolah Dasar) education, three years of junior secondary
school (SLTP) education, three years senior secondary school (SLTA), and
three or five years of higher education (PT). In addition to this,
there is a two-year kindergarten (TKK: Taman Kanak-Kanak). Various types
of school are delineated in Figure F.1.

F.002   Besides those in Figure F.1 there are many other types of
schools. The salient characteristics of the structure of educational
institutions are existence of many types of vocational-type schools
starting from the junior secondary level and existence of religious
schools attended by a significant share of students in terms of the
number of students. For example, roughly 16 percent of all primary
school students was in Islamic religious schools (Madrasah) in Indonesia
in 1971. Table F.1 presents the share of Islamic religious schools in
Indonesia. Enrollment in Islamic schools in Central Java is shown in
Table F.2.a, and basic indicators of Islamic schools are in Table F.2.b.

F.003   Another salient characteristic is the high share of non-public
school education at the junior and senior secondary levels. In terms
of number of students, roughly 50 percent of students were in non-public
schools at each level in Central Java in 1975. Table F.2.a gives details.

Figure F.1 Existing Education System, Indonesia, 1977

	Kindergarten (TKK)	Primary School (SD)						Junior Secondary School (SLTP)			Senior Secondary School (SLTA)			Higher Institution (PT)				
Grade		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII
Age	5 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Others
Primary Teacher Training, Secondary Teacher Training (IKIP)

Home Ec. (SKKA)

Academy

Commercial (SMEA)

Technical Institute

Technical (STM)

General (SMA)

University

Agricultural (SPMA)

Teacher Training Inst. (PGA)

Isl. (M. Aliyah)

Islamic Institute (IAIN)

Others

Home Economics (SKKP)

Commercial (SMEP)

Technical (ST)

General (SMP)

Agricultural (SPMP)

Islamic Primary

Isl. (Tsanawiyah)

Ministry of Education

General

Islamic Primary (M. Ibtidaiyah)

Ministry of Agriculture

Ministry of Religion

Note: ° indicates school leaving examination.

Source: 1. Kanwil Education, 1977
2. IBRD, Education Sector Survey Report, IBRD, 1975

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Table F.1   Number of Students by Type and Denomination of School
Indonesia, 1971

| Level Type | | Number of Students | | Total | | |
		Public and Subsidized School (in 1,000)	Fully Private School (in 1,000)	(in 1,000)	(%)	(%)
Primary	Non-Madrasa SD [1/]	12,404	870	13,274		84.2
	Madrasah Ibtidaiyah	90	2,410	2,500		15.8
	Total (in 1,000)	12,494	3,280	15,774		100.0
	(%)	79.2	20.8	100.0		
	School Age Population [2/]			19,500		
SLTP	SMP	720	382	1,102	77.5	
	ST	146	17	163	11.4	
	SMEP	88	20	108	7.6	
	SKKP	33	5	38	2.7	
	Agr.	6	4	10	0.7	
	Other	1	0	1	0.1	
	Total Non-Islamic	994	428	1,422	100.0	80.4
	Madrasah Tsanawiyah	30	166	196		
	P.G.A. [3/]	50	100	150		
	Total Islamic	80	266	346		19.6
	Total (in 1,000)	1,070	694	1,768		100.0
	(%)	60.7	39.3	100.0		
	School Age Population [2/]			7,969		
.SLTA	SMA	218	75	293	40.0	
	STM	95	28	123	16.7	
	SMEA	86	75	161	22.0	
	SKKA	11	5	16	2.1	
	SPG	72	23	95	13.0	
	Agr. (SPMA+STMA)	18	3	21	2.9	
	Other	24	0	24	3.3	
	Total Non-Islamic	524	209	733	100.0	86.3
	Madrasah Aliyah	10	36	46		
	P.G.A. [3/]	25	45	70		
	Total Islamic	35	81	116		13.7
	Total (in 1,000)	559	290	849		100.0
	(%)	65.8	34.2	100.0		
	School Age Population [2/]			6,605		

(continued)

Table F.1 (continued)

	Level Type	Number of Students		Total		
		Public and Subsidized School (in 1,000)	Fully Private School (in 1,000)	(in 1,000)	(%)	(%)
PT	University	88	54	142	60.7	
	Technical Institute	10	0	10	4.3	
	Academy	25	20	45	19.2	
	College	2	5	7	3.0	
	IKIP	25	5	30	12.8	
	Total Non-Islamic	150	84	234	100.0	92.9
	IAIN	18	0	18		7.1
	Total (in 1,000)	168	84	252		100.0
	(%)	66.7	33.3	100.0		

Note: 1/ Madrasa stands for Islamic.
        2/ Data from IBRD, Indonesia Education Sector Survey Report, 1975
            Annex 4.
        3/ Prorated into upper and lower cycle of secondary educations.
        4/ Including partly subsidized school.
        5/ Including partly subsidized and excluding fully private.

Source: IBRD, Indonesia Education Sector Survey Report, 1975, Annex 3.

Table F.2.a   Number of Students by Type and Denomination of School

Central Java, 1975

Level	Type	Non-Islamic School				Islamic School3/		
		Public1/ (in 1,000)	Non-Public (in 1,000)	Total (in 1,000)	(%)	Public1/ (in 1,000)	Non-Public (in 1,000)	Total (in 1,000)
SD (in 1,000)		2,166.0	291.1	2,385.1		4.6	443.4	448.0
(%)		90.8	9.2	100.0				
SLTP	SMP	83.6	132.6	216.2	69.7			
	ST	44.9	8.7	53.6	17.3			
	SMEP	20.4	8.6	29.0	9.3			
	SKKP	6.1	5.4	11.5	3.7			
	Total (in 1,000)	155.0	155.3	310.3	100.0	3.8	19.4	23.2
	(%)	50.0	50.0	100.0				
SLTA	SMA	26.8	19.4	46.2	34.5			
	STM	11.5	27.8	39.3	29.3			
	SMEA	14.9	13.8	28.7	21.4			
	SKKA	1.7	3.3	5.0	3.7			
	SPG	8.6	4.2	12.8	9.6			
	Other (Excl. Islamic)	2.0	n.a.	2.0	1.5			
	Total (in 1,000)	65.5	68.5	134.0	100.0	0.3	5.4	5.7
	(%)	48.9	51.1	100.0				
University2/	(in 1,000)	9.6	4.2	13.8				
(1972 Data)	(%)	69.6	30.4	100.0				

Notes: 1/ State (Negeri).
2/ Data from BPS, Social Indicators 1975, 1975, Table 5.10.
3/ Data from Mr. Ludjito, IAIN. Year is not specified but seem to be 1976.

Source: Kanwil Education/Province, Situasi Pendidikan (Dalam Angka), 1975, 1975 Table 3.

F-5

Table F.2.b   Number of Islamic Students, Teachers, and Schools by Type and Denomination,
Central Java 1/

Level	Type	Number of Students		Number of Teachers		Number of Schools	
		Public2/ (in 1,000)	Non-Public (in 1,000)	Public2/	Non-Public	Public2/	Non-Public
Kindergarten			41.7		732		1,718
SD		4.6	443.4	155	15,478	17	3,707
SLTP	Tsanawiyah	3.8	19.4	238	1,032	20	189
	PGA (4 Years)	2.1		184		14	
SLTA	Aliyah	0.3	5.4	15	107	3	47
	PGA (6 Years)	7.2	31.1	516	1,920	16	306
Not Specified	Private Islamic Religious Sch. 3/		49.5		1,110		1,685

Note: 1/ Year is not specified but seems to be 1976.
2/ State.
3/ This offers mainly religious subjects.

Source: Mr. A. Ludjito, IAIN, Semarang.

F.1.2 Private Formal Education

F.004   Schools in Indonesia may be public or private. Private schools
are classified as subsidized private, partly-subsidized private, and
fully private, according to the amount of public support they receive.
Based on a table from a IBRD report, the distribution of schools among
these categories was as follows in 1971: 1/

(Unit: Percent)

| | Public | Private | | | Not Known | Total |
		Subsidized	Partly Subsidized	Private Purely		
Primary	64	4	1	25	6	100
Junior Secondary	29	4	6	60	1	100
Senior Secondary	32	5	4	57	2	100

Since growth in public primary enrollments has slowed recently, the
relative importance of private institutions has been increasing.

F.005   A private school which seeks financial assistance from the
government must fullfill the following conditions. To become "aided",
i.e., partly subsidized, a school must have functioned for at least two
years as a fully private school, must have at least two qualified
teachers, must be operated by a recognized body, and three-fourth of
its students must meet public school entrance requirements. An "aided"
school receives assistance from the government for teacher salaries but
teacher's fees are not regulated. After three years, an aided school
may become a "subsidized" school if it meets more stringent requirements,
e.g., all students meet public entrance requirements, the school must use
the national curricula and have at least three qualified teachers. The
subsidy consists of either reimbursement of all teacher salaries or
the employment of public teachers in the school. Finally, the school
may become a state school.

F.006   One problem is that, with few exceptions, private schools are
generally lower in quality than public schools.

1/ IBRD, Indonesia Education Sector Survey, 1975, Appendix A p. 10.

F.1.3 Islamic Schools

F.007   According to a Study team counterpart expert in human resources, there are two kinds of Islamic school: relegion-oriented schools, and education-oriented schools. In the religion-oriented schools, over 60 percent of class time is devoted to religious education and students did not take the national graduation examination. As a consequence, the graduates could not apply to the national schools at the next level. In the education-oriented schools, most of the time is devoted to a standard curriculum, and students take the national graduation examination. Therefore they can proceed to any type of school at the next level. But, this situation was changed by the Three Ministerial Decree in 1975 to upgrade the quality of Islamic schools. By this decree, all graduates from Islamic schools can apply to any national school at the next level.

F.008   The educational quality of Islamic schools measured by the result of the national graduation examination is said to be low. It is said that national schools show the highest result, private schools except Islamic schools the second, and Islamic schools the third in general.

F.2   SD Gross Enrollment Ratio by KB/KDYs

F.009   The population of school age children in 1974 to 1976 are estimated by the Study team. The estimation method is as follows: All the school age children data are derived from 5 ages cohort kabupaten population data for 1974. Each 5 ages population was prorated into one age population, and, for example, populations of age 7, 8, 9, 10, 11, and 12 are assembled to make up SD school age children. For the population in 1975, populations of age 6 through 11 are assembled to make up SD school age children in 1975. For the population in 1976, populations of age 5 through 10 are summed together, based on the assumption that natural decrease of each cohort is negligible and its social decrease is zero, which means the results can be overestimates for kabupatens and be underestimates for kotamadyas. Student data came from the Provincial Office of Education Department (Kanwil Pendidikan), and it excludes Islamic religious school students.

F.010   Table F.3 presents the result of the population estimation of the school age children and the estimation of the gross enrollment ratio for SD.

F.3   Educational Indicators of SD, SLTP and SLTA

F.011   Tables F.4 and F.5 present the average repeater ratios and numbers of schools by SD, SLT and SLTA. Tables F.6 to F.8 present various indicators of SD education, tables F.9 and F.10 present data on SLTP, and tables F.11 and F.12 present data on SLTA.

Table F.3   SD Gross Enrollment Ratio by Kabupaten/Kotamadya
Central Java, 1974 – 1976

		1974				1975			
		Population of School Age Children	Number of Students	Gross Enrollment Ratio	Rank	Population of School Age Children	Number of Students	Gross Enrollment Ratio	Rank
1.	KDY Magelang	18,640	10,310	55.3	23	20,176	12,107	60.0	23
2.	KDY Surakarta	61,902	33,722	54.5	24	64,874	35,202	54.3	24
3.	KDY Salatiga	9,192	7,155	77.8	11	9,525	7,407	77.8	15
4.	KDY Semarang	102,744	44,517	43.3	27	106,052	47,275	44.6	29
5.	KDY Pekalongan	15,569	8,227	52.8	25	16,237	8,505	52.4	26
6.	KDY Tegal	–	12,395	–	–	–	12,865	–	–
7.	KB Cilacap	147,399	91,567	62.1	22	151,066	102,513	67.9	22
8.	KB Banyumas	129,486	112,217	86.7	8	133,124	121,646	91.4	8
9.	KB Purbalingga	75,888	53,737	70.8	18	79,006	60,655	76.8	17
10.	KB Banjarnegara	74,682	52,981	70.9	17	76,748	57,558	75.0	18
11.	KB Kebumen	154,131	116,833	75.8	13	156,786	129,712	82.7	11
12.	KB Purworejo	85,140	93,032	109.3	1	85,737	97,752	114.0	1
13.	KB Wonosobo	61,386	47,244	77.0	12	62,664	51,564	82.3	12
14.	KB Magelang	131,247	62,813	47.9	28	134,810	70,395	52.2	27
15.	KB Boyolali	90,378	66,999	74.1	16	92,145	71,495	77.6	16
16.	KB Klaten	122,229	118,599	97.0	4	124,734	125,085	100.3	5
17.	KB Sukoharjo	65,058	53,201	81.8	9	68,012	58,088	85.4	9
18.	KB Wonogiri	106,110	107,894	101.7	2	111,904	114,977	102.7	4
19.	KB Karanganyar	60,915	48,741	80.0	10	62,476	50,528	80.9	13
20.	KB Sragen	81,849	60,940	74.5	15	84,098	65,870	78.3	14
21.	KB Grobogan	116,170	105,144	90.5	6	118,762	113,081	95.2	7
22.	KB Blora	79,989	59,830	74.8	14	81,418	67,876	83.4	10
23.	KB Rembang	40,149	34,842	86.8	7	40,958	39,002	95.2	6
24.	KB Pati	114,054	72,038	63.2	21	115,051	86,035	74.8	19
25.	KB Kudus	42,330	38,919	91.9	5	–	45,899	103.3	3
26.	KB Jepara	55,485	55,659	100.3	3	56,128	60,041	107.0	2
27.	KB Demak	80,850	52,428	64.8	20	81,697	59,796	73.2	20
28.	KB Semarang	117,607	57,989	49.3	26	123,095	65,611	53.3	25
29.	KB Temanggung	66,876	44,327	66.3	19	68,050	48,976	72.0	21
30.	KB Kendal *	–	56,964	–	–	–	46,062	–	–
31.	KB Batang *	–	34,995	–	–	–	35,169	–	–
32.	KB Pekalongan *	–	34,923	–	–	–	41,340	–	–
33.	KB Pemalang *	–	63,464	–	–	–	73,069	–	–
34.	KB Tegal *	–	67,368	–	–	–	81,808	–	–
35.	KB Brebes	173,043	74,422	43.0	29	181,091	87,301	48.2	28
Total Except 6 KAB/KDY [1]/ With Asterisk (*)		2,480,498	1,786,327	72.0		2,550,867	1,961,948	76.9	
Total Central Java		3,865,172	2,056,436	53.2		4,028,926	2,252,261	55.9	

Table F.3 (continued)

			1976				Ratio of SD School Age Children against KB/KDY Population (1974)
			Population of School Age Children	Number of Students	Gross Ratio Enrollment	Rank	
1.	KDY	Magelang	–	11,901	54.0	23	16.0
2.	KDY	Surakarta	70,860	35,179	49.6	26	14.2
3.	KDY	Salatiga	9,970	7,326	73.5	19	12.6
4.	KDY	Semarang	110,052	42,005	38.2	29	14.6
5.	KDY	Pekalongan	17,052	8,086	47.4	27	13.5
6.	KDY	Tegal *	–	11,725	–	–	–
7.	KB	Cilacap	158,128	104,195	65.9	22	12.0
8.	KB	Banyumas	140,747	122,637	87.1	8	11.8
9.	KB	Purbalingga	84,772	63,646	75.1	17	12.4
10.	KB	Banjarnegara	80,155	63,122	78.7	12	12.1
11.	KB	Kebumen	159,629	127,945	80.2	10	16.0
12.	KB	Purworejo	86,348	96,739	112.0	2	12.7
13.	KB	Wonosobo	64,838	53,283	82.2	9	11.3
14.	KB	Magelang	141,839	60,083	42.4	28	15.5
15.	KB	Boyolali	95,106	73,540	77.3	14	12.3
16.	KB	Klaten	130,624	125,052	95.7	6	11.9
17.	KB	Sukoharjo	73,194	58,526	80.0	11	12.4
18.	KB	Wonogiri	120,078	116,496	97.0	4	11.4
19.	KB	Karanganyar	65,383	48,656	74.4	18	11.5
20.	KB	Sragen	87,940	62,418	71.0	20	12.1
21.	KB	Grobogan	122,952	116,875	95.1	7	12.5
22.	KB	Blora	84,488	64,668	76.5	16	12.5
23.	KB	Rembang	42,341	40,723	96.2	5	10.6
24.	KB	Pati	117,074	77,573	66.3	13	13.1
25.	KB	Kudus	47,892	47,357	98.9	3	9.1
26.	KB	Jepara	58,163	68,066	117.0	1	9.1
27.	KB	Demak	84,018	64,452	76.7	15	13.1
28.	KB	Semarang	127,733	65,077	50.9	25	16.9
29.	KB	Temanggung	70,143	48,956	69.8	21	13.7
30.	KB	Kendal *	–	65,345	–	–	–
31.	KB	Batang *	–	33,772	–	–	–
32.	KB	Pekalongan *	–	41,869	–	–	–
33.	KB	Pemalang *	–	68,996	–	–	–
34.	KB	Tegal *	–	82,709	–	–	–
35.	KB	Brebes	190,376	84,783	44.5	24	15.7
Total Except 6 KAB/KDY 1/ With Asterisk (*)			2,663,935	1,959,365	73.6		
Total Central Java			4,152,735	2,328,233	56.1		

Note: 1/ Source: BAPPEPA, Java Tengah Selayang Pandang 1975, 1975 for the total population.
Source: 1. BAPPEDA, Jawa Tengah Selayang Pandang 1975, 1975, for the population.
      2. Dinas Education (Dinas PD & K) for the number of students.

Table F.4 Average Repeater Ratio and
Continuing Graduates Ratio
Central Java, 1974

	Average Rpeater Ratio TI %	Total Student CJ	Total Repeater CJ	Average Repeater Ratio CJ %	Continuing[3] Graduates Ratio CJ %	Continuing[2] Graduates
SD	11.2	2,324,425	225,659	9.1	55 (to SLTP) 58 (to all kinds)	
SMP	3.3	206,975	8,145	3.9	81	38,000
SMEP	3.0	28,884	749	2.6	77	3,900
ST	3.7	51,631	1,683	3.3	56	5,300
SKKP	3.6	10,683	465	4.4	49	690
SLTP	-	298,173	11,042	3.7	77	47,890
SMA	4.1	48,017	2,802	5.8		
SMEA	2.6	28,860	950	3.3		
STM	3.8	34,858	1,399	4.0		
SKKA	2.5	4,373	78	1.8		
SPG	3.3	9,358	272	2.9		
SLTA	-	125,466	5,501	4.4		

Note: 1/ TI stands for Total Indonesia, and CJ stands for Central Java.
2/ Continuing Graduates means those who have graduated from one
type of school and have proceeded to next level schools.
3/ The ratio means the number of continuing graduates divided by
the number of graduates.

Source: BP3K, Statistik Persekolahan, Departemen P&K, 1974, Bukul,
through Buk 10, BP3K, JKT, 1976.

Table F.5   Number of Schools by KB/KDYs
Central Java, 1973-1975

KB/KDY	SD 1973[1]	SD 74[1]	SD 75[2]	SLTP 1973[1]	SLTP 74[1]	SLTP 75[2]	SLTA 1973[1]	SLTA 74[1]	SLTA 75[2]	Avg Growth SP	Avg Growth SLTP	Avg Growth SLTA
1. KDY Magelang	65	65	71	25	25	33	13	13	12	4.6	16.0	- 3.8
2. KDY Surakarta	251	251	278	72	72	79	58	58	58	5.4	4.9	0.0
3. KDY Salatiga	44	44	49	14	14	14	12	12	13	5.7	0.0	4.2
4. KDY Semarang	371	384	433	78	78	87	50	49	46	8.4	5.7	- 4.0
5. KDY Pekalongan	78	70	80	19	19	20	11	11	12	- 1.3	2.6	4.5
6. KDY Tegal	62	60	71	21	21	21	11	11	9	7.3	0.0	- 9.0
7. KB Cilacap	600	606	831	61	60	62	12	11	13	19.3	0.8	4.2
8. KB Banyumas	724	725	749	55	55	51	22	23	23	1.7	- 3.6	2.3
9. KB Purbalingga	312	319	373	19	19	20	6	4	4	9.8	2.6	-16.6
10. KB Banjarnegara	355	377	454	24	24	23	4	7	6	13.9	- 2.0	25.0
11. KB Kebumen	575	575	630	53	53	50	18	18	18	4.8	- 2.8	0.0
12. KB Purworejo	485	485	496	69	67	67	29	29	26	1.1	- 1.4	- 5.2
13. KB Wonosobo	396	396	390	18	18	17	5	5	5	- 0.8	- 2.7	0.0
14. KB Magelang	426	440	482	50	50	51	17	17	14	6.6	1.0	- 8.8
15. KB Boyolali	385	385	455	39	39	37	11	11	12	9.1	- 2.5	4.5
16. KB Klaten	606	606	696	82	82	82	45	35	34	7.4	0.0	-12.2
17. KB Sukoharjo	324	301	342	27	27	28	6	6	7	2.7	1.9	8.3
18. KB Wonogiri	591	591	609	60	61	62	11	14	12	1.5	0.8	4.5
19. KB Karanganyar	322	306	352	44	37	34	13	7	7	4.7	-11.4	-23.1
20. KB Sragen	377	371	429	44	44	45	13	13	12	6.9	1.2	- 3.8
21. KB Grobogan	594	589	656	39	39	38	9	9	10	5.2	- 1.3	5.5
22. KB Blora	338	371	426	35	35	36	15	15	15	13.0	1.4	0.0
23. KB Rembang	214	212	250	17	17	17	6	7	6	8.4	0.0	0.0
24. KB Pati	446	451	546	37	37	35	10	10	10	11.2	- 2.7	0.0
25. KB Kudus	229	234	279	27	27	25	15	15	13	10.9	- 3.7	- 6.6
26. KB Jepara	285	296	360	19	19	20	7	7	5	13.2	2.6	-14.3
27. KB Demak	309	315	368	13	13	13	4	4	4	19.1	0.0	0.0
28. KB Semarang	380	382	455	23	22	27	9	7	7	9.8	8.7	-11.1
29. KB Temanggung	304	304	340	22	22	22	9	9	8	5.9	0.0	- 5.5
30. KB Kendal	355	359	423	23	22	21	5	5	5	9.6	- 4.3	0.0
31. KB Batang	257	265	318	11	12	12	-	1	1	11.8	4.5	0.0
32. KB Pekalongan	333	332	394	12	12	11	-	-	-	9.2	- 4.2	-
33. KB Pemalang	388	388	486	29	27	27	5	5	6	12.6	- 3.4	10.0
34. KB Tegal	379	381	460	15	15	14	6	5	6	10.7	- 3.3	0.0
35. KB Brebes	419	414	561	25	25	25	6	8	7	16.9	0.0	8.3
Total 1973	12,579			1,221			473					
Total 1974		12,650			1,209			461				
Total 1975			14,592			1,226			446	8.0	0.2	- 2.9

Notes and Sources: 1/ Source: BAPPEDA, *Jawa Tengah Selayang Pandang*, 1975 Hardback.
2/ Source: Kanwil Pendidikan, *Situasi Pendidikan (Dalam Angka)*, 1975.

Table F.6 SD Basic Indicators
Central Java, 1974

	(1)	Number [1] of SDs (2)	Number of [2] Students (3) (in 1,000)	Number of [4] Teachers (4)	Area [1] (5) (km^2)	Population [4] (6) (in 1,000)	Number [1] of Desa (7)
1.	KDY Magelang	65	10	448	19	117	11
2.	KDY Surakarta	251	34	1,627	46	437	51
3.	KDY Salatiga	44	7	307	17	73	9
4.	KDY Semarang	384	45	2,525 [3]	99	704	112
5.	KDY Pekalongan	70	8	444	18	116	22
6.	KDY Tegal	60	12	317 [3]	13	112	10
7.	KB Cilacap	606	92	3,244	2,334	1,225	214
8.	KB Banyumas	725	112	6,799	1,311	1,098	328
9.	KB Purbalingga	319	54	2,052	766	611	237
10.	KB Banjarnegara	377	53	2,575	1,134	617	281
11.	KB Kebumen	575	117	4,258	1,367	963	460
12.	KB Purworejo	485	93	3,019	1,112	670	494
13.	KB Wonosobo	396	47	2,531	964	543	263
14.	KB Magelang	440	63	3,522	1,176	849	373
15.	KB Boyolali	385	67	6,518	1,076	733	267
16.	KB Kalten	606	119	5,125	694	1,029	401
17.	KB Sukoharjo	301	53	2,205	485	525	167
18.	KB Wonogiri	591	108	3,327	1,921	932	308
19.	KB Karanganyar	306	49	2,056	794	531	177
20.	KB Sragen	371	61	2,208 [3]	999	676	212
21.	KB Grobogan	589	105	3,588 [3]	2,011	933	280
22.	KB Blora	371	60	2,045	2,623	642	295
23.	KB Rembang	212	35	2,433	1,836	379	295
24.	KB Pati	451	72	2,140 [3]	1,710	871	405
25.	KB Kudus	234	39	1,761	477	463	130
26.	KB Jepara	296	56	1,638	1,035	608	187
27.	KB Demak	315	52	1,715	1,120	618	263
28.	KB Semarang	382	58	2,238	1,096	695	274
29.	KB Temanggung	304	44	1,997	833	489	288
30.	KB Kendal	359	57	1,704	998	680	306
31.	KB Batang	265	35	1,346 [3]	750	487	246
32.	KB Pekalongan	332	35	1,527	875	578	298
33.	KB Pemalang	388	63	3,184	1,046	829	216
34.	KB Tegal	381	67	2,876	861	899	296
35.	KB Brebes	414	74	2,408	1,676	1,103	290
	Total	12,650	2,056	87,707	35,292	22,835	8,466

(continued)

Table F.6 (continued)

	Population per School (8) = (6)/(2) (in 1,000)	Area per School (9) = (5)/(2)	Number of Schools per Desa (10) = (2)/(7)	Number of Students per School (11) = (3)/(2)	Number of Students per Teacher (12) = (3)/(4)
1. KDY Magelang	1.80	0.29	5.9	154	22
2. KDY Surakarta	1.74	0.18	4.9	135	20
3. KDY Salatiga	1.66	0.39	4.8	159	22 [3]
4. KDY Semarang	1.83	0.26	3.4	117	18 [3]
5. KDY Pekalongan	1.66	0.26	3.2	114	18
6. KDY Tegal	1.87	0.22	6.0	200	38 [3]
7. KB Cilacap	2.02	0.15	2.8	152	28
8. KB Benyumas	1.51	3.85	2.2	154	16
9. KB Purbalingga	1.92	2.40	1.3	169	26
10. KB Banjarnegara	1.64	3.01	1.3	141	20
11. KB Kebumen	1.67	2.38	1.3	203	27
12. KB Purworejo	1.38	2.29	0.9	192	30
13. KB Wonosobo	1.37	2.43	1.5	119	18
14. KB Magelang	1.93	2.67	1.2	143	17
15. KB Boyolali	1.90	2.79	1.4	174	10
16. KB Klaten	1.70	1.15	1.5	196	23
17. KB Sukoharjo	1.74	1.61	1.8	176	24
18. KB Wonogiri	1.58	3.25	1.9	183	32
19. KB Karanganyar	1.74	2.59	1.7	160	23 [3]
20. KB Sragen	1.82	2.69	1.8	164	28 [3]
21. KB Grobogan	1.58	3.41	2.1	178	29 [3]
22. KB Blora	1.73	7.07	1.3	162	29
23. KB Rembang	1.79	8.66	0.7	165	14
24. KB Pati	1.93	3.79	1.1	159	34 [3]
25. KB Kudus	1.98	2.04	1.8	166	22
26. KB Jepara	2.05	3.49	1.6	189	34
27. KB Demak	1.96	3.55	1.2	165	30
28. KB Semarang	1.82	2.87	1.4	152	25
29. KB Temanggung	1.61	2.74	1.1	145	22
30. KB Kendal	1.84	2.78	1.2	158	33 [3]
31. KB Batang	1.84	2.83	1.1	132	26 [3]
32. KB Pekalongan	1.74	2.64	1.1	105	22
33. KB Pemalang	2.14	2.69	1.8	162	19
34. KB Tegal	2.36	2.26	1.3	176	23
35. KB Brebes	2.66	4.05	1.4	178	30
Total	1.81	2.79	1.49	163	23

Notes and Sources: 1/ Source: BAPPEDA, _Jawa Tengah Selayang Pandang, 1975_, 1975, Softback.

2/ Source: Table 10.22.

3/ Data in 1975, Source: BAPPEDA, _Jawa Tengah Dalam Angka 1973-1975_, 1976.

4/ Source: BAPPEDA, _Jawa Tengah Selayang Pandang, 1975_, Hardback.

Table F.7   SD Net Enrollment Ratios, Central Java, 1974

Grade at SD	Age	School Age Population [1] CJ	Total Students [2] CJ	Share of [2] Students at Proper Age (Total Indonesia)	Students at Proper Age CJ	(Net Enrollment Ratio at Proper Age)
		(2)	(3)	(4) %	(5) = (3)x(4)	(6) = (5)/(2) %
I	7	728,988	566,651	57.3	325,000	44.6
II	8	695,073	477,342	47.3	226,000	
III	9	661,155	420,061	42.0	176,000	
IV	10	627,238	347,316	40.4	140,000	
V	11	593,320	283,069	39.5	112,000	
VI	12	559,403	229,986	39.0	90,000	
Total or Average		3,865,177	2,324,425	-	1,069,000	27.7 (Net Student Ratio at Proper Ages)
Graduates		-	210,870	-	-	

Note and Sources: 1/ Source: Study team's estimates based on Java Tengah Selayang Pandang, 1975, Hardback, BAPPEDA.

2/ Source: BP3K, Statistik Perseko Lahan Department P&K, 1974, Buku 1, SD, BP3K, Jakarta, 1976.
Students at proper age means, for example, at the first grade, students of ages of six and seven in Indonesia.

Table F.8 Net and Gross Dropout Ratio of SD[3/], Central Java, 1974

Karesidman (Res.) (1)	Number of Students [1/] (2)	Number of Dropout [2/] (3)	Gross Dropout Ratio (4)=(3)/(2) (%)	Gross Survival Ratio (5)=100-(4) (%)	Net Survival Ratio (6)=(5)6 (%)	Net Dropout Ratio (7)=100-(6) (%)
Res. Semarang	324,197	22,313	6.9	93.1	65.1	34.9
Res. Pati	261,288	20,634	7.9	92.1	61.0	39.0
Res. Surakarta	490,096	56,757	11.6	88.4	47.7	52.3
Res. Kedu (Magelang)	374,559	31,281	8.4	91.6	59.1	40.9
Res. Banyumas	310,502	36,509	11.8	88.1	46.8	53.2
Res. Pekalongan	295,794	30,798	10.4	89.6	51.7	48.3
Total Jateng	2,056,436	198,292	9.6	90.4	54.6	45.4

Notes and Sources:

1/ Source: Table F.3 in Appendix F.

2/ Source: Dinas Education (Dinas PDLK).

3/ Definitions are as follows:

Gross Dropout Ratio, in this case, is defined as "Total dropouts in a year at the end of the year" divided by "Total students at the beginning of the year". However, data from sources 1/ and 2/ have no definitions for their statistics, therefore the above conditions are assumed for calculation. Net Dropout Ratio, in this case, is calculated based on the assumptions that every grade will have the same dropout ratio as the Gross Dropout Ratio in 1974, and that all entering students will be promoted to the next grade without any repetition.

Table F.9   Number of SLTP, Central Java, 1975

(Unit: Schools)

Kabupatent Kotamadya		SLTP (Junior Secondary School)				
		SMP (General)	SMEP (Economic)	ST (Technical)	SKKP (Home Economics)	Total
1.	KDY Magelang	16	2	2	3	23
2.	KDY Surakarta	56	5	11	7	79
3.	KDY Salatiga	7	2	4	1	14
4.	KDY Semarang	66	5	13	3	87
5.	KDY Pekalongan	13	2	4	1	20
6.	KDY Tegal	13	2	4	2	21
7.	KB Cilacap	39	6	14	3	62
8.	KB Banyumas	26	7	12	6	51
9.	KB Purbalingga	13	2	4	1	20
10.	KB Banjarnegara	13	6	3	1	23
11.	KB Kebumen	27	7	13	3	50
12.	KB Purworejo	48	8	10	1	67
13.	KB Wonosobo	9	6	2	–	17
14.	KB Magelang	43	1	7	–	51
15.	KB Boyolali	21	11	4	1	37
16.	KB Klaten	47	12	18	5	82
17.	KB Sukoharjo	15	5	7	1	28
18.	KB Wonogiri	42	5	12	3	62
19.	KB Karanganyar	19	7	5	3	34
20.	KB Sragen	34	5	5	1	45
21.	KB Grobogan	24	8	5	1	38
22.	KB Blora	21	6	6	3	36
23.	KB Rembang	14	–	2	1	17
24.	KB Pati	25	3	5	2	35
25.	KB Kudus	16	4	4	1	25
26.	KB Jeara	16	1	2	8	27
27.	KB Demak	9	1	2	1	13
28.	KB Semarang	22	–	5	–	27
29.	KB Temanggung	16	2	3	1	22
30.	KB Kendal	16	2	2	1	21
31.	KB Batang	9	1	2	–	12
32.	KB Pekalongan	9	1	1	–	11
33.	KB Pemalang	19	3	3	2	27
34.	KB Tegal	11	1	2	–	14
35.	KB Brebes	20	3	1	1	25
	Total	814	142	199	68	1,223

Source: Kanwil Pendidikan, Situasi Pendidikan (Dalam Angka), 1975, 1975.

Table F.10   SLTP (SMP, ST, SMEP and SKKP) Gross Enrollment Ratio
by Kabupaten/Kotamadya, Central Java, 1975 and 1976

			1975				1976			
			School Age Population	Number of Students	G.E. Ratio	Rank	School Age Population	Number of Students	G.E. Ratio	Rank
1.	KDY	Magelang	7,724	7,638	98.9	2	6,353	13,442	211.6	2
2.	KDY	Surakarta	29,134	26,577	91.2	3	30,144	31,078	103.1	4
3.	KDY	Salatiga	4,329	5,466	126.3	1	4,349	10,475	240.9	1
4.	KDY	Semarang	44,250	25,459	57.6	5	47,254	33,301	70.5	5
5.	KDY	Pekalongan	7,168	4,719	65.8	4	6,943	10,990	158.5	3
6.	KDY	Tegal *	-	6,528	-	-	-	10,858	-	-
7.	KB	Cilacap	72,382	11,921	16.5	19	73,078	19,891	27.2	22
8.	KB	Banyumas	63,492	11,949	18.8	17	64,556	20,046	31.1	15
9.	KB	Purbalingga	36,765	4,819	13.8	24	37,237	10,359	27.8	21
10.	KB	Banjarnegara	35,509	5,696	16.0	20	36,247	9,612	26.5	23
11.	KB	Kebumen	72,750	14,016	19.3	16	73,983	20,969	28.3	18
12.	KB	Purworejo	39,533	20,415	51.6	6	41,169	28,240	68.6	6
13.	KB	Wonosobo	30,125	3,678	12.2	26	30,250	8,399	27.8	20
14.	KB	Magelang	61,455	13,811	22.5	14	64,169	18,161	28.3	19
15.	KB	Boyolali	43,112	7,895	18.3	18	44,115	12,883	29.2	17
16.	KB	Klaten	60,111	23,831	39.6	7	61,366	25,517	41.6	8
17.	KB	Sukoharjo	30,636	7,637	24.9	12	31,415	10,917	34.8	13
18.	KB	Wonogiri	47,665	13,917	29.2	10	48,981	18,512	37.8	10
19.	KB	Karanganyar	29,645	7,866	26.5	11	30,044	9,898	32.9	14
20.	KB	Sragen	39,008	11,560	29.6	9	39,848	14,166	35.6	12
21.	KB	Grobogan	55,152	7,319	13.3	25	56,446	11,395	20.2	28
22.	KB	Blora	38,559	8,838	22.9	13	39,658	12,065	30.4	16
23.	KB	Rembang	19,701	4,240	21.5	15	19,794	4,276	21.6	27
24.	KB	Pati	55,789	7,853	14.1	23	53,242	11,581	21.8	26
25.	KB	Kudus	21,115	6,968	33.0	8	20,630	10,799	52.3	7
26.	KB	Jepara	28,920	4,321	14.9	22	28,635	7,348	25.7	24
27.	KB	Demak	39,577	2,644	6.7	29	40,560	9,359	23.1	25
28.	KB	Semarang	48,462	5,802	12.0	27	51,130	7,650	15.0	29
29.	KB	Temanggung	31,518	4,990	15.8	21	32,625	11,724	35.9	11
30.	KB	Kendal *	-	4,199	-	-	-	10,305	-	-
31.	KB	Batang *	-	2,656	-	-	-	8,320	-	-
32.	KB	Pekalongan *	-	1,972	-	-	7,281	6,388	-	-
33.	KB	Pemalang *	-	5,960	-	-	-	10,264	-	-
34.	KB	Tegal *	-	3,576	-	-	-	8,848	-	-
35.	KB	Brebes	70,813	6,409	9.1	28	27,745	10,557	38.1	9
Total Except 6 KB/KDYs With Asterisk (*)			1,164,458	288,234	24.8		1,147,669	423,610	36.9	
Total Jateng			1,601,083	313,125	19.6		1,686,416	478,593	28.4	

Sources: 1. BAPPEDA, Jawa Tengah Selayang Pandang 1975, 1975, for the population.
2. KANWIL Education, (KANWIL PD+K) for the students data.