

THE UNITED STATES OF AMERICA

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OFFICE OF THE ASSISTANT SECRETARY FOR PUBLIC AFFAIRS

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1974

150

MINISTRY OF CONSTRUCTION
GOVERNMENT OF THE REPUBLIC OF KOREA

PRELIMINARY FEASIBILITY REPORT
ON
THE LONG-TERM MULTIPURPOSE DAM SCHEMES

(SECOND STAGE)

VOL. 2

ANNEXES

JULY 1979

JAPAN INTERNATIONAL COOPERATION AGENCY

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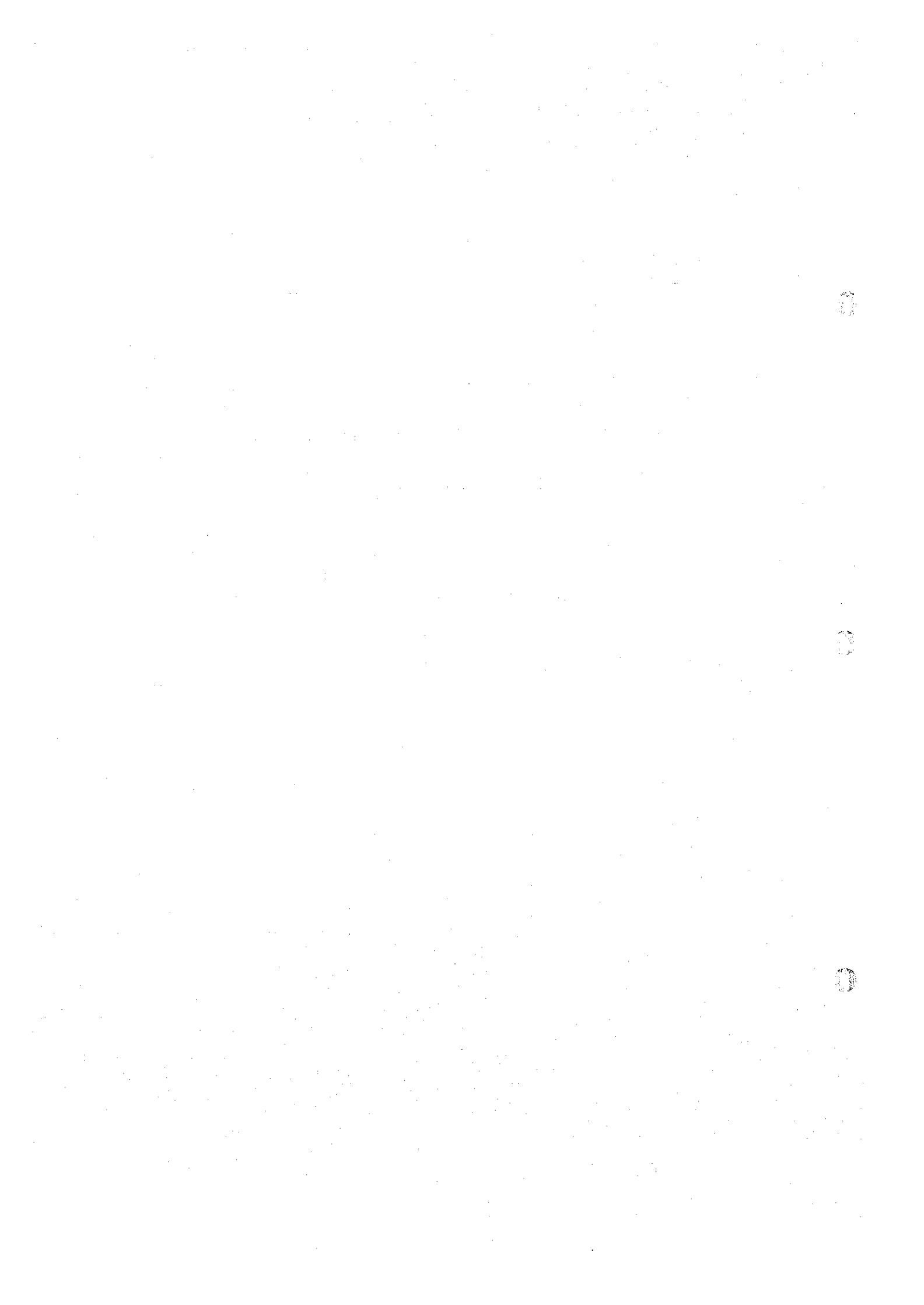


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VOL. 2

- A GENERAL ECONOMY
- B METEOROLOGY AND HYDROLOGY
- C FLOOD INFLOW TO THE PROPOSED DAMSITES
- D FLOOD CONTROL EFFECT BY THE PROPOSED DAMS
- E SOIL
- F AGRICULTURE



GLOSSARY

Local Terms of Administrative Areas

- Do - Province
- Gun - Subdivision of province, similar to a county
- Myeon - Subdivision of a gun
- Ri - Village of community of more than one village
- Eub - Town of the administrative level of a Myeon
- Si - City of the administrative level of a Gun
- Si - Special City of the administrative level of a Do
- Gu - Subdivision of special city equivalent to Gun
- Dong - Subdivision of Gu or Si equivalent to Myeon or Eub
- Sa - Temple

Natural Features

- San - Mountain
- Cheon - Small river
- Gang - Larger river
- Do - Island
- Bug - North
- Dong - East
- Nam - South
- Seo - West

Spelling of names of places, rivers, etc.

The forms of English spelling of the regions, rivers, etc. that have been adopted are those promulgated by the National Ministry of Education.

CONVERSION FACTORS AND ABBREVIATIONS

1) Length

mm = millimetre
cm = centimetre
m = metre
km = kilometre

2) Areas

ha = 10^4 m^2 = hectare
pyeong = 3.31 m^2
danbo = 300 pyeong = 992 m^2
jeongbo = 10 danbo = 0.992 ha

3) Volume

lit = $1,000 \text{ cm}^3$ = litre
Seok = Volume containing
100 kg unhulled rice
144 kg polished rice
105 kg barley
138 kg naked barley
141 kg polished barley
138 kg wheat
114 kg unhulled millet
124 kg polished millet
142 kg rye
135 kg corn
135 kg soybeans

4) Weight

mg = milligramme
g = gramme
kg = kilogramme
ton = 1,000 kg = ton
gwan = 3.75 kg
geun = 0.16 gwan = 600 g

5) Time

s = second
min = minute
h = hour
d = day
yr = year

6) Money

\$ = US dollar
W = Won
\$ = ₩ 485, 1978 price level
mill = \$ 10^{-3}

7) Electrical Measures

V = Volt
A = Ampere
H = Hertz (cycle)
kV = Kilovolt
W = Watt
kW = Kilowatt
MW = Megawatt
kWh = Kilowatt hour
MWh = Megawatt hour
GWh = Gigawatt hour
Ohm = Resistances
mho = Micromhos = conductance

8) Other Measures

ppm = parts per million
% = per cent
o/oo = per thousand
PS = Horse power (75 mkg/s)
pH = scale for acidity
°C = degree centigrade
 10^3 = thousand
 10^6 = million
 10^9 = billion (milliard)

9) Derived measures are based on the same symbols:

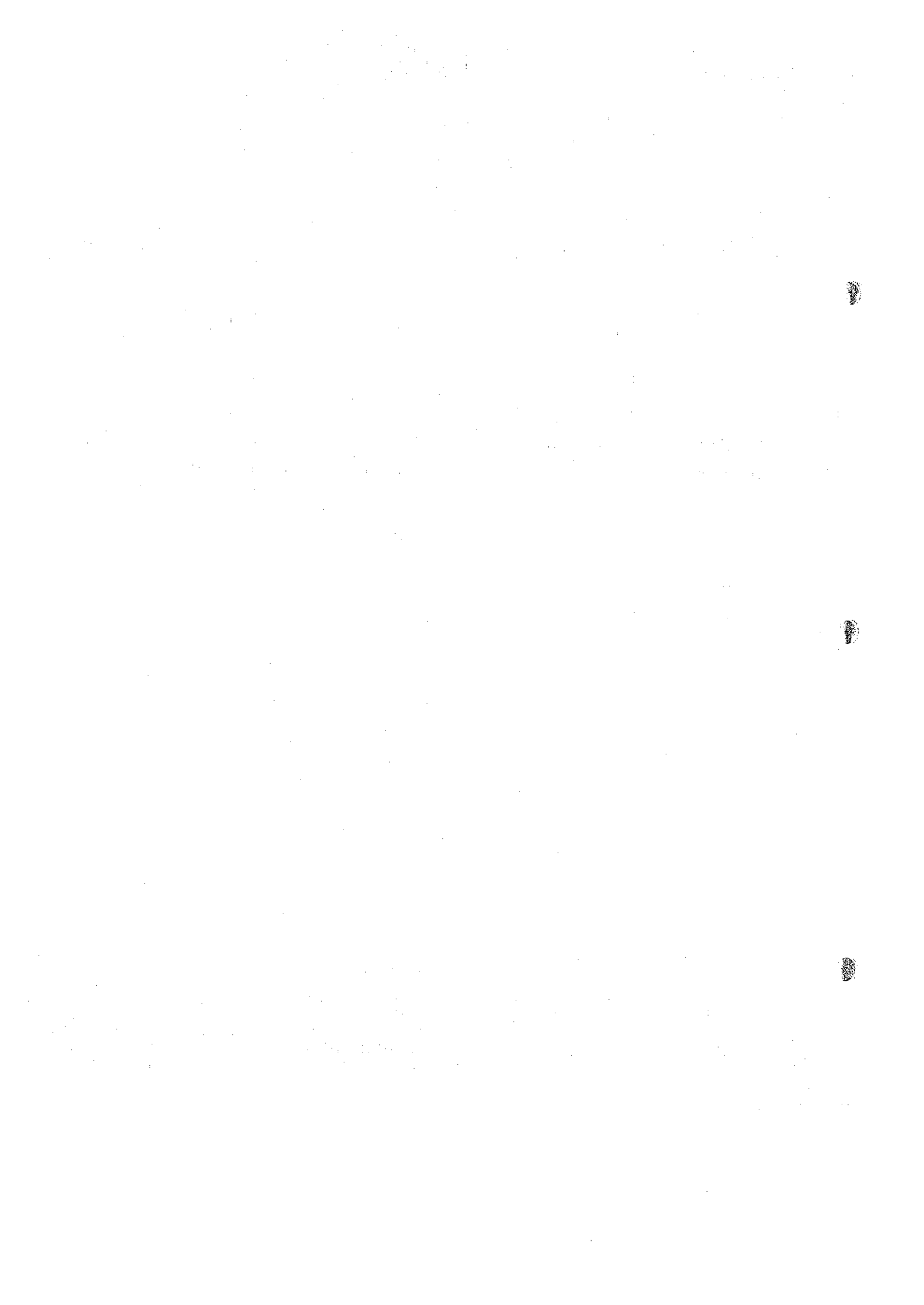
m^3/s = cubic metre per second
ton/ha = ton per hectare
kWh/yr = kilowatt hour per year
kVA = kilovolt ampere

10) Technical Terms

BOD = Biochemical oxygen demand
dia. = Diameter
El. = Elavation above mean sea level
H = Height or water head
HWS = Reservoir high water surface
K = Potassium
LWS = Reservoir low water surface
N = Nitrogen
P = Phosphorus
PVC = Polyvinyl chloride
TSP = Triple superphosphate
TWS = Tailwater surface of turbine

ABBREVIATIONS

ADB	Asian Development Bank
ADC	Agricultural Development Corporation
BOK	Bank of Korea
DMZ	Demilitarized zone
EPB	Economic Planning Board
FAO	Food and Agriculture Organization of the United Nations
FLIA	Farm Land Improvement Association
HRBS	USAID/KOWACO Han River Basin Joint Survey Team
IBRD	International Bank for Reconstruction and Development
IR	International Rice Research Institute
ISWACO	Industrial Site and Water Resources Development Corporation
JICA	Japan International Cooperation Agency
KECO	Korea Electricity Company
KOWACO	Korea Water Resources Development Corporation, previous name of ISWACO
MAF	Ministry of Agriculture and Fisheries
MOC	Ministry of Construction
NACF	National Agricultural Cooperatives Federation
OECF	Overseas Economic Cooperation Fund, Japan
ORD	Office of Rural Development
PORD	Provincial Office of Rural Development
UNDP	United Nations Development Programme
UNSF	United Nations Special Fund
US/AID	United States Agency for International Development
USDA	United States Department of Agriculture
USCE	United States Corps of Engineers
KOR 13	UNDP/FAO Soil Survey Project
KOR 16	UNDP/FAO Pre-Investment Survey of the Nagdong River Basin Project
KOR 72	UNDP/FAO Nagdong River Basin Delta Study
KOR 75	UNDP/FAO Nagdong River Basin Development Project Feasibility Study



A N N E X A

GENERAL ECONOMY

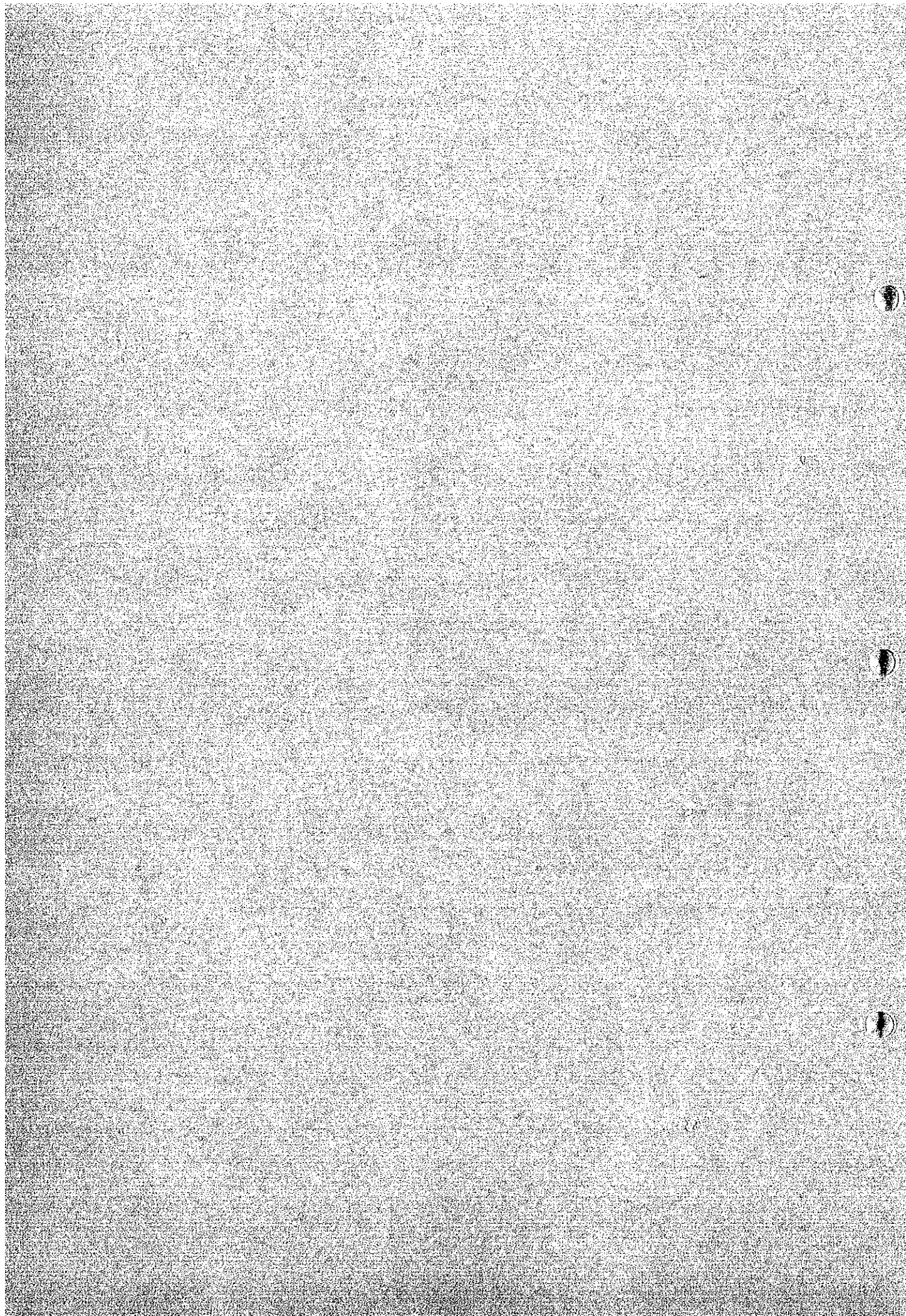


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A 1 INTRODUCTION

This ANNEX presents the social and economic data of whole nation and the studied areas; the Han, the Nagdong and the Seomjin river basins, to facilitate for the study of the Long-Term Multipurpose Dam Schemes.

The projections of GNP and population for the whole nation and each basin included in this ANNEX as well were incorporated into the power demand (ANNEX J) and water demand (ANNEX H) projections.

The basic data for the analysis were gathered from national and provincial publications and from relevant study reports.

A 2 LAND AND POPULATION

A 2.1 Land and Administrative Division

The Republic of Korea of 98,758 km² consists of the southern half of the Korean peninsula and surrounding islands, being located approximately between 33° and 39° north in latitude and between 124° and 131° east in longitude.

Korea is administratively divided into 2 Special Cities, 9 Dos (provinces), 138 Guns (counties) and 34 Sis (cities). Guns are composed of Myeons (rural districts of Gun) and Eubs (urban districts of Gun), both of which are subdivided into Ris (villages). Large cities are divided into Kus (wards) each of which are further divided into Dongs (towns).

A 2.2 Population

A 2.2.1 National population

According to the latest population census conducted on October 1, 1975, the national population of Korea was 34.7 x 10⁶ persons with the density of 351 persons/km², which indicated that Korea belonged to the group of countries of the-highest-densely-populated in the world. The past population censuses conducted six times in the past showed high growth rates after the Korean War. The growth rate, however, has steadily declined from 3.0 % in the period of 1955-1960 to 2.0 % in 1970-1975. The Government's effort to promote family planning has been one of the causes of this declining trend. The census populations in the period of 1955-1975 are presented below (Ref. A 11):

	1955	1960	1966	1970	1975
Population (10 ³ persons)	21,526	24,989	29,193	31,435	34,709
Average Annual Growth Rate (%)	1.1	3.0	2.6	1.9	2.0

A 2.2.2 Regional population

The regional population based on the aforementioned past censuses indicates a migration trend to urban areas. As indicated in Table A 1, the population as percentage to the national population increased year by year in Seoul and Busan. On the contrary, that of provinces, though population itself increased, declined with only an exception of Gyeonggi Do in which located are industrial or satellite cities of Seoul such as Incheon, Suwon, Anyang, Euijeongbu, and Seongnam.

Especially in case of Seoul, population as percentage to the whole nation increased from 7 % in 1955 to 20 % in 1975.

A 2.2.3 Urban and rural population

Urban population has been increasing rapidly in these years. According to the past population censuses, the urban population (the population in the cities with population of more than 100×10^3) increased from 5.1×10^6 in 1955 to 16.3×10^6 in 1975, or in terms of percentage to whole nation, it was almost doubled from 24 % in 1955 to 47 % in 1975 (Table A 2).

A 3 ECONOMY OF KOREA

Major economic data are tabulated in Table A 3.

A 3.1 Gross National Product (GNP)

The First Five-Year Plan for economic development started in 1962. Since then, the economy of Korea has made a rapid progress.

During the period of 10 years from 1966 to 1976, GNP (at 1978 constant price) increased from W $6,150 \times 10^9$ to W $17,030 \times 10^9$ at the average annual growth rate of 10.7 %. The per capita GNP (at current price) rose from \$ 126 to \$ 692 in the same period (Table A 3).

In 1978, according to the preliminary figures presented on January 5, 1979 by the Bank of Korea, the GNP is reported to have amounted to W $22,260 \times 10^9$ (\$ 46×10^9). The per capita GNP is accordingly estimated to have exceeded \$ 1,000 for the first time (\$ 1,242).

As the economy made a rapid progress, the industrial structure has changed with a fast pace. During the period of 1966-76, the weight of agriculture, forestry and fishery sector in GNP declined from 35 % to 25 %, while that of manufacturing sector rose from 19 % to 30 %.

A 3.2 Foreign Trade

The rapid growth of Korean economy would be attributable to the export-oriented industrialization policy.

The commodity exports increased from \$ 250×10^6 (at current price) in 1966 to \$ $7,720 \times 10^6$ in 1976 with an average annual growth rate of more than 40 %. In 1977, it exceeded the \$ $10,000 \times 10^6$ level for the first time and it was reported to have amounted to \$ $12,720 \times 10^6$ for the year of 1978.

Major commodities of exports in 1976 included, in order of value, clothing, textile yarn and fabrics, electrical machinery, miscellaneous manufactured articles, footwear, iron and steel, transport equipments and fish and fish preparations.

As export increased, the commodities imports, major of which were raw materials and manufactured goods, has swelled as well. The commodity imports increased from \$ 720 x 10⁶ in 1966 to \$ 8,770 x 10⁶ in 1976 with an average annual growth rate of about 28 %. In the year of 1978, the commodity import was reported to have amounted to \$ 14,610 x 10⁶.

Major commodities of imports in 1976 included, in order of value, petroleum and petroleum products, machinery of metal-working, textile and electric, transport equipments, chemical elements and compounds, cereals and cereal preparations, iron and steel, wood, lumber and cork and textile fibres.

Reflecting the fact that imports have exceeded exports chronically, the international balance of payment has been kept unbalanced. But the deficit seems to have been reducing lately (Table A 4). In 1977, the unbalance of goods and services account amounted to \$ 210 x 10⁶. The deficit of merchandise trade (\$ 470 x 10⁶) was surpassed by remittance of services abroad (\$ 1,720 x 10⁶), mainly in the Middle East countries, and by tourism revenue (\$ 370 x 10⁶). The capital and monetary gold account was nearly balanced.

The rapid improvement in international balance of payment has resulted in increase in foreign exchange reserves. The foreign exchange reserves increased from \$ 200 x 10⁶ in 1966 to \$ 3 x 10⁹ in 1976. At the end of 1977, it was reported to amount to \$ 4.3 x 10⁹ (Table A 3).

The debt-service ratio that is defined as the repayment on loan as percentage of exports of goods and services had been gradually declining recently to several percent from the historical maximum at the beginning of 1970's (Table A 3). This means that the capacity to obtain new foreign loans has been improved in these years.

A 3.3 Wholesale and Consumer Prices

During the period of 1968-1973, the wholesale price had risen at an average annual rate of 9.1 %, but the world-wide oil crisis had raised it by 42.1 % in 1974. Thereafter, it kept settled down to 12.1 % in 1976 and 9.0 % in 1977. In 1978, however, it is rising again; in

October 1978, 13.1 % hike was estimated compared with one year before.

The consumer price had increased at an average annual rate of 9.9 % in the period of 1968-1973. In 1975, it rose as high as 26.3 % affected by the oil crisis. In the following years, it cooled down to 15.4 % in 1976 and 10.2 % in 1977. But in October 1978, the average annual increase of 17.0 % was reported.

A 3.4 Employment

The rapid expansion of economy has increased the opportunities of employment. The employment increased at an average annual rate of 4 % during 1966-1976. During this period, employment in the agriculture, forestry and fishery sector increased by 0.7×10^6 persons. While, in the mining and manufacturing sector, employment increased by 1.8×10^6 persons. As a result, the share of employment of the agriculture, forestry and fishery declined from 58 % to 45 %, while that of the mining and manufacturing rose from 11 % to 22 %. The ratio of unemployment decreased from 7.1 % to 3.9 % during the same period.

A 3.5 Infrastructure

A 3.5.1 Transportation

(1) Road

The total length of national and provincial roads in Korea was 45,660 km in 1977, of which 12,100 km or 27 % were paved. Recently many express highways have been constructed or planned; the total length of the express highway is planned to be 1,700 km by 1991. The road condition as of 1977 is summarized below.

	Total Length (km)	Paved (%)	Unpaved (%)	To be improved (%)
Express Highway	1,225	100.0	-	-
National Road	8,232	51.3	48.6	0.1
Provincial Road	36,207	18.4	73.0	8.6
Total	45,664	26.5	66.7	6.8

(2) Railway

The railway system in Korea is well developed connecting all major cities throughout the country. In 1977, the total length of the railway was 5,710 km, of which 14 % was electrified. The railway carried about 302×10^6 passengers and about 48×10^6 tons of cargo in 1977.

(3) Airlines

There are three international airports in Korea and domestic airlines connect eight cities over the country by jet planes. The airline carried about 1.1×10^6 passengers in 1977.

A 3.5.2 Communication

The communication facilities of Korea is well conditioned. In 1977, there were about 1.5×10^6 telephones of which 82 % was automatic calling.

The communication facilities as of 1977 is as shown below.

	Telephone	Telegraph & Telephone Office	Post Office
Total Numbers	1,537,100	50	1,980
No. of Persons per Unit	23.7	728,600	18,400

A 3.5.3 Power

The generation capacity of electric power was 5,780 MW at the end of 1977 of which thermal power occupied 88 %, while hydropower was only 12 %.

In July, 1978, the first Korean nuclear power plant was completed in Gori with the installed capacity of 587 MW.

The energy sales and annual peak demand in 1977 in Korea Electric Company's system were 22,833 GWh and 4,187 MW, respectively, and their growth rate for preceding three years were as high as 17.6 % and 12.8 %.

The installation of new generating facilities will be quickly required accompanied with the expansion of economy.

A 3.6 Fourth Five-Year Economic Development Plan

The Government launched the Fourth Five-Year Economic Development Plan (1977-1981) in 1977 aiming at an economic growth of 9.2 % (in real terms) per annum during the plan period. The total investment of W 18,000 x 10⁹ (\$ 37 x 10⁹) is expected.

The major objectives of the Fourth Five-Year Plan include increase of employment opportunities, expansion of investment for social development and achievement of equilibrium in the balance of payment.

When these targets are achieved, GNP in 1981 will reach W 16,210 x 10⁹ (at 1975 constant price). The per capita GNP (at current price) is expected to increase from \$ 692 in 1976 to \$ 1,512 in 1981 (Table A 5).

A 4 POPULATION PROJECTION

Projections of national population and basin population were conducted in this study for the purpose of supplying basic data to other field of studies including water requirement projection, power demand projection and others.

A 4.1 Projection of National Population

The projection of national population was made on the basis of the projected growth rate. As stated before (A 2.2), the growth rate of population in Korea has been declining steadily for more than two decades. The descending trend of growth rate in population is generally observed in such countries where living standard is rapidly rising.

Analyzing the historical data and referring to the similar historical trend in other countries, the future average growth rate per annum was projected as shown below.

1976 - 1986	:	1.6 %
1987 - 1996	:	1.4 %
1997 - 2001	:	1.2 %

By applying the above projected growth rate to the base year population (mid-year of 1975), the future national population was projected as shown in Table A 7. In obtaining the base year population, the census population of October 1, 1975 was adjusted by extrapolation to estimate 1975 mid-year population.

The projected population is also depicted in Fig. A 1 together with previous projection for the convenience of comparison. In 1991, the present projection (44.0×10^6) fell close to the projection by KDI (45.3×10^6) that made the projection until 1991 (Ref. A 1). In 2001, the national population of 50.1 million persons with the population density of 507 persons/km^2 was projected in this study.

The newly projected national population was used as the basis for the projection of basin populations in A 4.2.

A 4.2 Projection of Basin Population

Based on the latest population census conducted in October 1975, the basin population of the three studied rivers was estimated to be 11.7×10^6 in the Han, 6.0×10^6 in the Nagdong and 0.9×10^6 in the Seomjin in the present study. It corresponded to 33.7 %, 17.2 % and 2.5 % of the national population, respectively.

Basin population of the three studied rivers has been estimated by previous studies such as Ref. A 3 for 1966 in the Han, Ref. A 4 for 1955, 1960 and 1966 in the Nagdong, and Ref. A 5 from 1961 through 1971 in the Seomjin.

According to the above-mentioned data, the basin population increased by 3.1×10^6 in the nine years of 1966-1975 in the Han. In the same period, it increased by 0.6×10^6 in the Nagdong while in the Seomjin it decreased by 60×10^3 .

The future basin population was estimated by the Ratio Method, as follows:

- a) Obtaining the historical population ratios between the nation and the basin,
- b) Plotting the above ratios on graph paper,
- c) Determining the future population ratios (Fig. A 2) after studying the historical trends, socio-economic aspects and the government's development plans, and
- d) Deriving the future basin population by multiplying the ratios to the projected national population.

For the determination of the future population ratio between the nation and the Han basin, the whole basin was divided into two; Seoul and the Han basin excluding Seoul. The above historical and future population ratios were plotted and determined separately and aggregate to obtain the future population ratio of the whole Han basin.

The historical and projected basin population is presented in Table A 6 and Fig. A 3. In the Han and the Nagdong basins, the 2001 basin populations were projected to reach 16.5×10^6 and 7.0×10^6 , respectively, increasing with the compounded growth rate of 1.3 % and 0.6 %, while in the Seomjin, the basin population is estimated to decrease to 750×10^3 in 2001.

The population reduction expected in the Seomjin comes from the non-industrial characteristics of the basin. The social migration from the basin is expected to continue in a foreseeable future.

A 5 GNP PROJECTION

GNP projection was made in the present study by means of a regression analysis by plotting the historical GNP (at 1978 constant price) from 1962 to 1978 on a semi-logarithmic paper. The regression coefficient was obtained to be 0.96.

The historical and projected GNPs at 1978 constant price are shown in Table A 8 and Fig. A 3 together with previous projections which were adjusted to 1978 constant price for the convenience of comparison.

The GNP projection made by KDI in 1977 (Ref. A 1) covers the period of 1977-1991. According to the KDI projection, in 1991, GNP will reach $W 77,800 \times 10^9$, which corresponds to $W 72,400 \times 10^9$ by the present projection. When the KDI projection is extrapolated to 2001, these two projections are so close that the difference is only about 3 %.

According to the present projection, GNP of Korea in 2001 will amount to about $\$ 400 \times 10^9$ at 1978 constant price level. The average annual growth rates are projected to be 9.8 % during 1976-81 and 10.3 % for the period of 1982-2001. Per capita GNP is projected to rise to $\$ 7,940$ in 2001 at 1978 constant price.

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Table A 1 HISTORICAL POPULATION OF NATION, TWO SPECIAL CITIES AND PROVINCES

 Unit: 10³ persons

Regions	1955		1960		1966		1970		1975	
	Popu- la- tion	Percent to Nation (%)	Popu- la- tion	Percent to Nation (%)	Popu- la- tion	Percent to Nation (%)	Popu- la- tion	Percent to Nation (%)	Popu- la- tion	Percent to Nation (%)
Seoul	1,575	7.3	2,445	9.8	3,803	13.0	5,525	17.6	6,889	19.8
Busan	1,049	4.9	1,164	4.7	1,430	4.9	1,876	6.0	2,454	7.1
Gyeonggi Do	2,364	11.0	2,749	11.0	3,108	10.6	3,353	10.7	4,040	11.6
Gangweon Do	1,496	7.0	1,637	6.6	1,833	6.3	1,865	5.9	1,862	5.4
Chungcheong-bug Do	1,192	5.5	1,370	5.5	1,550	5.3	1,480	4.7	1,522	4.4
Chungcheong-nam Do	2,223	10.3	2,528	10.1	2,905	10.0	2,858	9.1	2,949	8.5
Jeonla-bug Do	2,116	9.9	2,395	9.6	2,523	8.6	2,432	7.7	2,456	7.1
Jeonla-nam Do	3,128	14.5	3,553	14.2	4,050	13.9	4,005	12.7	3,985	11.5
Gyeongsang-bug Do	3,364	15.7	3,848	15.3	4,477	15.3	4,556	14.5	4,859	14.0
Gyeongsang-nam Do	2,721	12.6	3,018	12.1	3,176	10.9	3,119	9.9	3,280	9.4
Jeju Do	289	1.3	282	1.1	337	1.2	365	1.2	412	1.2
Whole country	21,526	100.0	24,989	100.0	29,193	100.0	31,435	100.0	34,709	100.0
										351

Source; Ref. A 11

Table A 2 HISTORICAL POPULATION OF MAJOR CITIES
(Cities of more than 100,000 population)

Major Cities	Unit: 10 ³ persons				
	1955	1960	1966	1970	1975
<u>Seoul</u>	1,575	2,445	3,803	5,525	6,889
<u>Busan</u>	1,049	1,164	1,430	1,876	2,454
<u>Gyeonggi Do</u>					
Incheon	321	401	527	643	800
Suwon	82	91	128	170	224
Seongnam	-	-	-	-	272
Euijeongbu	-	-	75	94	108
Anyang	-	-	-	-	135
Bucheon	-	-	-	-	109
<u>Gangweon Do</u>					
Chuncheon	68	83	100	122	141
Weonju	76	77	104	112	120
<u>Chungcheong-bug Do</u>					
Cheongju	81	92	124	144	193
Chungju	-	69	80	87	105
<u>Chungcheong-nam Do</u>					
Daejeon	173	229	316	414	507
<u>Jeolla-bug Do</u>					
Jeonju	124	188	221	262	311
Gunsan	86	90	103	112	154
Iri	62	66	78	86	117
<u>Jeolla-nam Do</u>					
Gwangju	233	314	404	502	607
Mogpo	114	130	162	178	193
Yeosu	73	87	102	114	131
Suncheon	62	69	79	91	108
<u>Gyeongsang-bug Do</u>					
Daegu	489	677	848	1,081	1,311
Pohang	52	60	66	79	134
Gyeongju	65	76	86	92	108
<u>Gyeongsang-nam Do</u>					
Masan	130	158	155	191	372
Jinju	78	87	107	122	155
Jinhae	68	68	81	92	104
Ulsan	-	-	113	159	253
<u>Jeju Do</u>					
Jeju	60	68	88	106	135
Total	5,121	6,789	9,380	12,454	16,250
Percent to National Population (%)	24	27	32	40	47

Source; Ref. A 11

Table A 3 TABLEAU ECONOMIQUE

	1961	1966	1971	1976	1977	1978 ^{/2}
<u>Gross National Product ^{/1}(W 10⁹)</u>						
GNP at current price	297	1,032	3,152	12,143	15,240	22,256
GNP at 1978 price	4,244	6,146	10,101	17,031	18,792	22,256
Annual growth rate at 1978 price	5.1	7.7	10.4	11.0	10.3	18.4
Per capita GNP (at current \$) (1962)	87	130	256	698	862	1,242
<u>Proportion of GNP by Industry (at current price)</u>						
Agr., forestry & fishery	40.2	35.4	28.9	24.8	23.7	21.2
Mining & quarrying	1.9	1.6	1.1	1.0	1.2	28.2
Manufacturing	13.4	18.5	21.7	30.0	28.8	
Construction	3.2	3.7	5.3	4.6	5.7	
Electricity & water	1.2	1.4	1.7	1.5	1.8	
Transport. & communic.	4.6	4.9	5.8	5.5	5.6	50.6
Commerce	12.6	17.2	19.0	18.3	18.2	
Public admin. & defense	6.9	5.2	5.3	4.8	5.2	
Others	15.1	10.8	11.3	10.6	10.3	
Rest of the world	0.9	1.3	-0.1	-1.1	-0.5	
	100.0	100.0	100.0	100.0	100.0	100.0
<u>Proportion of Expenditure on GNP</u>						
Private consumption	82.6	78.0	74.2	65.5	62.4	
Government consumption	13.5	10.2	11.3	12.2	12.8	
Gross capital formation	11.6	20.2	23.2	23.3	25.2	
Increase in stocks	1.5	1.5	2.4	1.7	1.0	
Exports	5.3	10.3	16.3	36.3	39.7	
Less: Import	-14.8	-20.1	-27.5	-37.8	-39.8	
Statist'l discrep'cy	-0.6	-1.4	0.2	-0.1	-0.8	
Net income from abroad	0.9	1.3	-0.1	-1.1	-0.5	
Total	100.0	100.0	100.0	100.0	100.0	100.0

Remarks; Blanks show data not available.

Sources; ^{/1} : Ref. A 7

^{/2} : Preliminary figures presented by BOK on Jan. 5, 1979.

Table A 3 Continued (2)

	1961	1966	1971	1976	1977	1978 ^{/2}
<u>Labor Force Employment (10³ persons)^{/1}</u>						
Economically active population		9,071	10,542	13,061	13,440	14,510 ^{/4}
Total Employed	9,788 ^{/3}	8,423	10,066	12,556	12,929	14,080
		(100)		(100)		
Agr., forestry & fishery	7,813	4,876	4,876	5,601	5,405	5,703
		(58)		(45)		
Mining & manufacturing	482	913	1,428	2,743	2,901	3,130
		(11)		(22)		
Social overhead & other services	1,193	2,634	3,762	4,212	4,623	5,220
		(31)		(33)		
Unemployed		648	476	505	511	430
Unemployment rate (%)		7.1	4.5	3.9	3.8	2.9
<u>Monthly Earnings (₩)^{/4}</u>						
All industries				62,362	82,355	105,350 ^{/5}
Manufacturing	2,830 ^{/6}	5,480 ^{/6}	16,611	51,685	69,168	88,400
Construction				115,274	154,519	211,880
Commerce				75,186	90,442	117,900
Transport & Communication				64,287	89,188	109,390
<u>Household Income (₩ 10³/year)^{/4}</u>						
Salary & wage earner's household in cities	84 ^{/3}	162 ^{/6}	452 ^{/7}	1,152	1,405	1,807 ^{/5}
Receipts per farm household	70	167	427	1,441	1,784	-
<u>Price Indices ^{/1}</u> (1978 = 100)						
Wholesale	10.8 ^{/8}	23.0 ^{/8}	33.5	82.2	89.8	100.0 ^{/9}
Consumer price in Seoul	10.5	22.1	38.1	79.3	87.4	100.0 ^{/9}

Remarks; Blanks show data not available.

Sources; ^{/1} : Ref. A 7
^{/2} : Preliminary figure presented by BOK on Jan. 5, 1979.
^{/3} : Ref. A 8
^{/4} : Ref. A 10
^{/5} : Average in April to June, 1978.
^{/6} & ^{/7} : Ref. A 8
^{/8} : Ref. A 9
^{/9} : Estimated from data of June, 1978.

Table A 3 Continued (3)

	1961	1966	1971	1976	1977	1978 ^{/2}
<u>Government Finance (W 10⁹)/¹</u>						
Tax revenue	25 ^{/3}	95	453	2,093	2,577	3,311
Non-tax revenue	27	36	133	279	414	571
Total	52	131	586	2,372	2,991	3,882
National defense	18		135	712	1,000	1,239
Current expenditure		133	217	730	1,503	1,838
Fixed capital formation	34	25	89	365	557	636
Others		-	159	719	284	245
Net lending		14	40	34	37	73
Total	52	172	640	2,560	3,380	4,031
Deficit	0	41	54	188	389	148

Remarks; Blanks show data not available.

Sources; ^{/1} : Ref. A 7

^{/2} : Preliminary figures presented by BOK on Jan. 5, 1979.

^{/3} : Ref. A 8

Table A 3 Continued (4)

	1961 ^{/3}	1966	1971	1976	1977	1978 ^{/2}
<u>Export (\$ 10⁶ FOB) (at current market price) ^{/1}</u>						
Food & live animal	9	41	70	508	945	
Beverages & tobacco	-	7	15	78	108	
Non-food material	21	47	45	196	300	
Fuel & lubricants	2	2	11	145	117	
Animal & vegetable oils	-	-	-	1	5	
Chemicals	1	1	15	119	226	
Manufactured goods classified by materials	4	84	328	2,336	3,019	
Machinery & transport equipment	1	10	87	1,280	1,741	
Miscellaneous manufactured article	1	59	446	3,052	3,585	
Total	39	251	1,067	7,715	10,046	12,060
<u>Import (\$ 10⁶ C.I.F) (at current market price) ^{/1}</u>						
Food & live animal	40	72	400	627	718	
Beverages & tobacco	-	-	4	30	34	
Non-food material	63	154	463	1,565	1,943	
Fuel & lubricants	27	42	139	1,747	2,186	
Animal & vegetable oils	4	6	21	63	86	
Chemicals	62	135	201	866	990	
Manufactured goods classified by materials	40	125	363	1,146	1,526	
Machinery & transport equipment	42	172	685	2,387	2,952	
Miscellaneous manufactured article	22	10	68	343	376	
Total	300	716	2,344	8,774	10,811	13,960

Remarks; Blanks show data not available.

Sources; ^{/1} : Ref. A 7

^{/2} : Preliminary figure presented by BOK on Jan. 5, 1979.

^{/3} : Ref. A 8

Table A 3 Continued (5)

	1961	1966	1971	1976	1977	1978
<u>Exchange Rate</u> ^{/1}						
W/\$ at end of year (Basic exchange rate by the Bank of Korea)	130.00	271.46	373.30	484.00	484.00	484.00
<u>Foreign Exchange Reserve</u> ^{/1}						
At end of year (\$ 10 ⁶)	207	245	568	2,961	4,306	
<u>Debt Service Ratio</u> ^{/2} (%)	0.2	2.5	18.7	8.9		

Remarks; Blanks show data not available.

Sources; ^{/1} : Ref. A 7

^{/2} : Ref. A 9 for 1961 and 1966
Ref. A 12 for 1971 and 1976

Table A 4 BALANCE OF PAYMENT
(at current price)

Unit: \$ 10⁶

	1971		1976		1977		1978 (Jan.-June) /1	
	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
I. Goods & Services								
Merchandise								
Transport	1,132	2,178	7,815	8,400	10,047	10,519	5,710	6,411
Travel	75	199	354	621	558	879	274	480
Investment income	31	15	275	46	370	103	199	80
Government N.I.E.	29	119	69	516	140	734	160	444
Other services	248	37	194	62	238	64	134	37
Total (I)	1,616	2,634	9,457	10,120	13,074	13,284	7,808	8,313
II. Transfer Payments	194	24	463	114	388	165	223	63
Net Total (I + II)	-	848	-	314	13	-	-	345
III. Capital & Monetary Gold								
Private long term capital	296	3	910	117	833	22	612	15
Private short term capital	153	18	439	83	329	308	-985	130
Central government	233	-	671	11	509	14	228	8
Central monetary institutions	21	-42	103	1,162	-71	994	-55	-424
Other monetary institutions	139	31	139	351	479	729	492	91
Others	2	0	15	-1	6	-1	3	0
Total (III)	844	10	2,277	1,723	2,085	2,066	295	-180
Net Total (III)	834	-	554	-	19	-	475	-
Net Errors & Omissions	14	-	-	240	-	32	-	130
Total (I + II + III)	2,668	2,668	12,197	12,197	15,547	15,547	8,326	8,326

Sources; Ref. A 7
/1 : Ref. A 10

Table A 5 THE FOURTH FIVE-YEAR ECONOMIC
DEVELOPMENT PLAN (1977-1981)

	1976	1981	Total or Average Growth Rate for 1977-1981
<u>GNP and Population</u>			
GNP (₩ 10 ⁹ , 1975 price)	10,442.4	16,214.3	9.2 %
GNP (\$ 10 ⁶ , current price)	24,811	58,660	18.8 %
Population (10 ³ persons)	35,860	38,807	1.59 %
Per capita GNP (\$, current price)	692	1,512	
<u>Growth Rate by Industry</u>			
Agriculture, forestry & fisheries (%)	7.0	4.0	4.0
Mining & manufacturing (%)	26.7	12.8	14.2
Social overhead capital & other services (%)	11.8	7.7	7.6
<u>Industrial Structure</u>			
Agricultural, forestry & fisheries (%)	23.6	18.5	-
Mining & manufacturing (%)	32.7	40.9	-
Social overhead capital & other services (%)	43.7	40.6	-
<u>Expenditure on GNP (1975 price)</u>			
Total consumption (₩ 10 ⁹)	8,247.7	11,983.3	-
Gross investment (₩ 10 ⁹)	2,896.5	4,219.9	18,008.1
(Ratio to GNP) (%)	27.7	26.0	26.2
Domestic savings (₩ 10 ⁹)	2,194.7	4,231.0	16,645.1
Foreign savings (₩ 10 ⁹)	701.8	-11.1	1,363.0
<u>External Transactions (Current price)</u>			
Exports (\$ 10 ⁶)	7,560	20,242	21.8 %
Imports (\$ 10 ⁶)	8,155	18,872	18.3 %

Sources; Ref. A 2

Table A 6 HISTORICAL AND PROJECTED BASIN POPULATION

Year	Population (10 ³ persons)	Average Annual Increase Rate (%)	Percent to Nation (%)	Population Density (persons/km ²)
1. Han Basin				
<u>Historical</u>				
1966	8,583	-	29.4	327
1975	11,706	3.5	33.7	447
<u>Projected</u>				
1981	12,900	1.6	34.0	492
1986	13,900	1.5	33.8	531
1991	14,800	1.3	33.5	565
1996	15,700	1.2	33.2	599
2001	16,500	1.0	33.0	630
2. Han Basin excluding Seoul ^{/1}				
<u>Historical</u>				
1966	4,780	-	16.4	186
1975	4,817	0.1	13.9	188
<u>Projected</u>				
1981	4,930	0.4	13.0	193
1986	5,270	1.3	12.8	206
1991	5,550	1.0	12.5	217
1996	5,790	0.9	12.2	226
2001	5,990	0.7	12.0	234

Remarks; Historical population was calculated from census populations; by Ref. A 3 for the Han for 1966, and by JICA team for 1975.

/1 : See Table H 8 for population of Seoul.

Table A 6 Continued (2)

Year	Population (10 ³ persons)	Average Annual Increase Rate (%)	Percent to Nation (%)	Population Density (persons/km ²)
3. Nagdong Basin				
<u>Historical</u>				
1960	4,814	-	19.3	204
1966	5,313	1.7	18.2	225
1975	5,955	1.3	17.2	252
<u>Projected</u>				
1981	6,260	0.8	16.5	265
1986	6,490	0.7	15.8	274
1991	6,690	0.6	15.2	283
1996	6,890	0.6	14.6	291
2001	7,020	0.4	14.0	297
4. Seomjin Basin				
<u>Historical</u>				
1966	937	-	3.2	191
1970	870	-1.8	2.8	185
1975	877	0.2	2.5	179
<u>Projected</u>				
1981	830	-0.9	2.2	172
1986	800	-0.8	2.0	163
1991	770	-0.8	1.8	157
1996	760	-0.3	1.6	155
2001	750	-0.3	1.5	153

Remarks; Historical population was calculated from census populations; by Ref. A 4 for the Nagdong and by Ref. A 5 for the Seomjin for the years before 1975, and by JICA team for 1975.

Table A 7 PROJECTED NATIONAL POPULATION

Year	National Population (10 ³ persons)	Annual Growth (%)	Population Density (persons/km ²)	Previous Projections	
				HRBR (10 ³ persons)	KDI (10 ³ persons)
1981	37,950	1.6	384	38,479	38,807
1986	41,080	1.6	416	40,643	42,088
1991	44,040	1.4	446	42,716	45,451
1996	47,210	1.4	478	44,895	
2001	50,110	1.2	507	47,185	

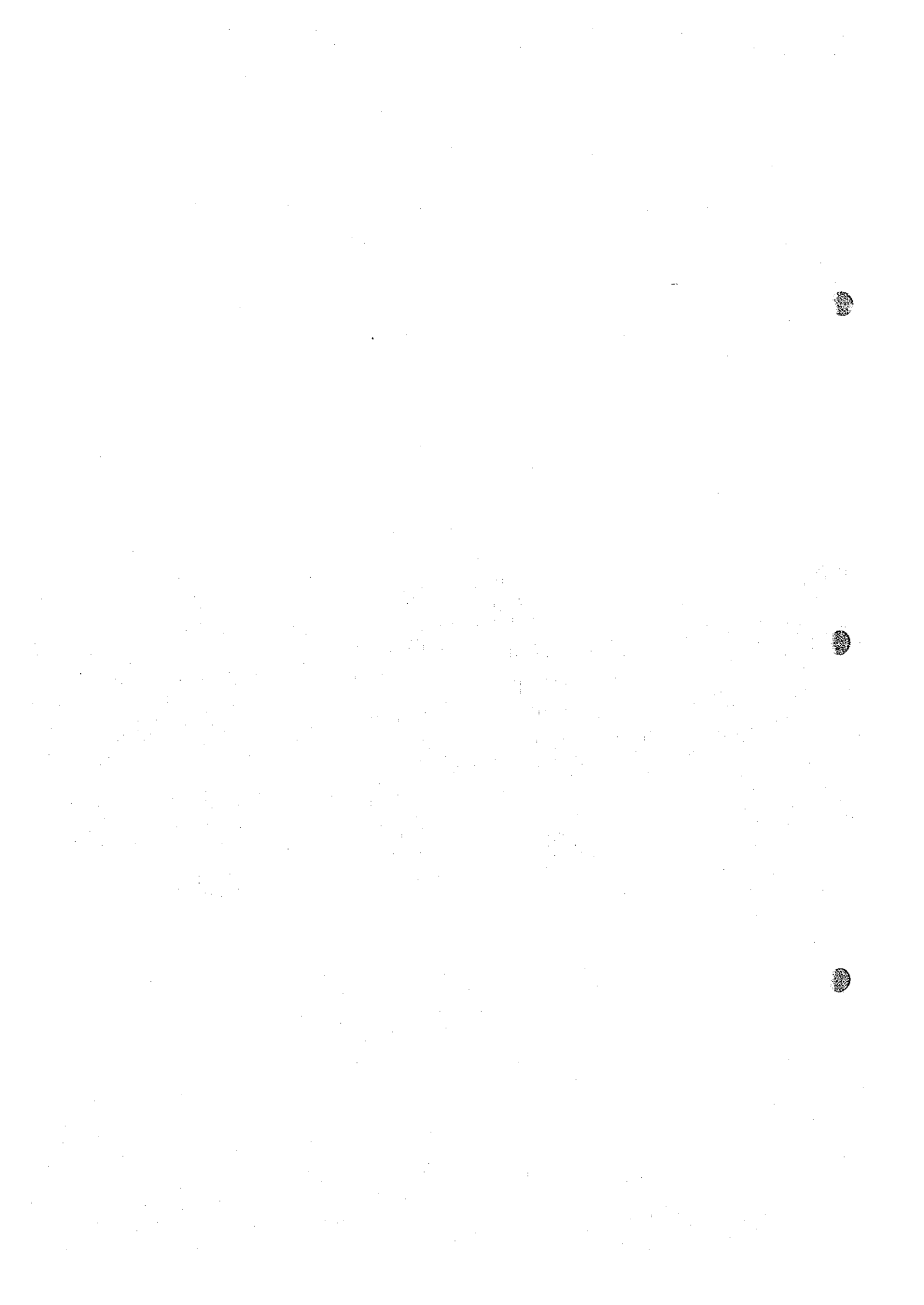
Table A 8 PROJECTED GNP OF KOREA
(at 1978 constant price)

Year	Projected GNP			Annual Growth (%)	Previous Projections	
	₩ 10 ⁹	\$ 10 ⁶	Per Capita (\$)		KDI/2 (₩ 10 ⁹)	HRBR/1 (₩ 10 ⁹)
1981	27,125	55,928	1,474	9.7	29,982	28,840
1986	44,301	91,341	2,224	10.3	48,286	42,489
1991	72,351	149,178	3,387	10.3	77,766	60,715
1996	118,163	243,636	5,161	10.3		86,138
2001	192,983	397,903	7,941	10.3		121,422

Remarks; Blanks show data not available.

Source ; /1 : Ref. A 1.

/2 : Ref. A 3.



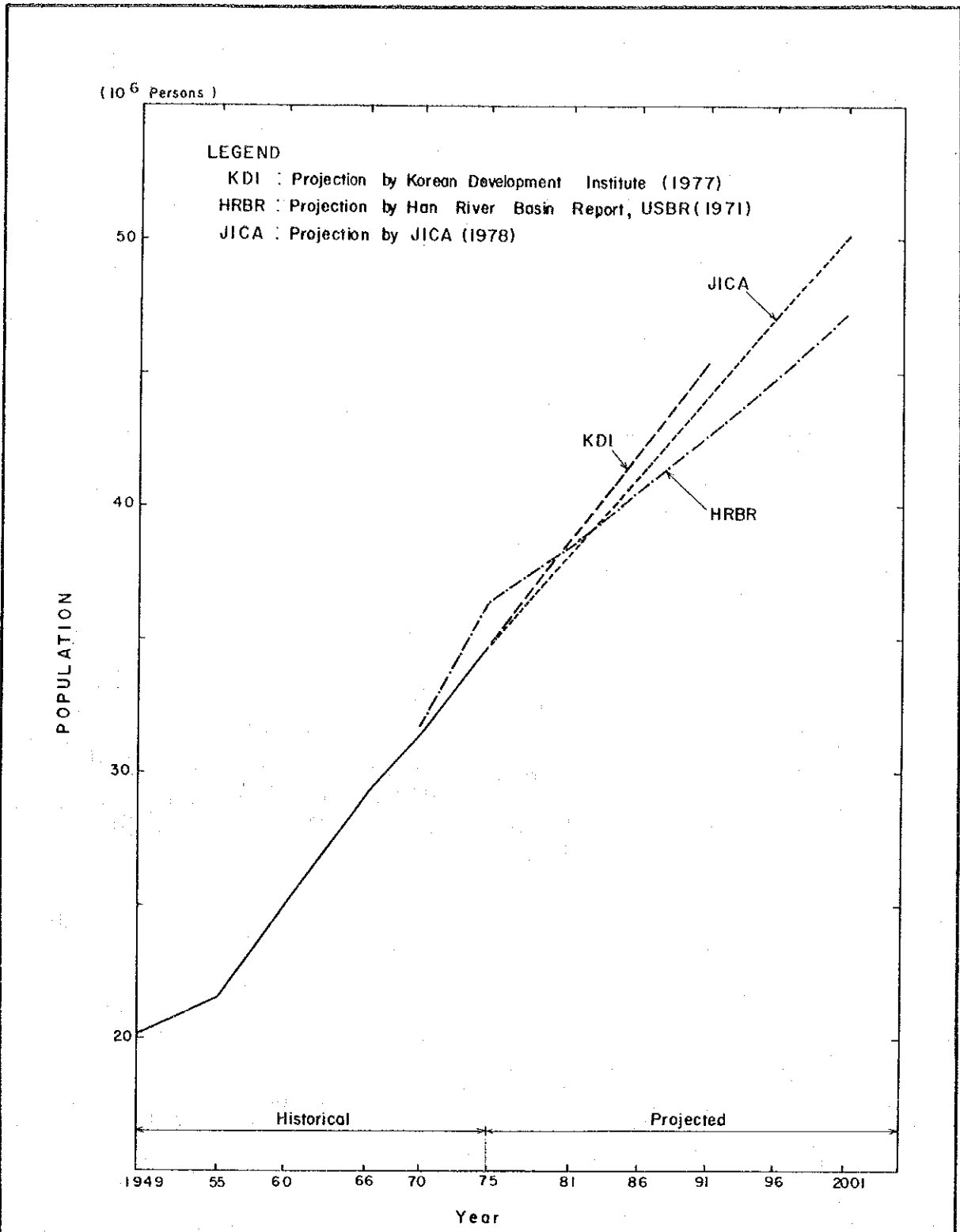
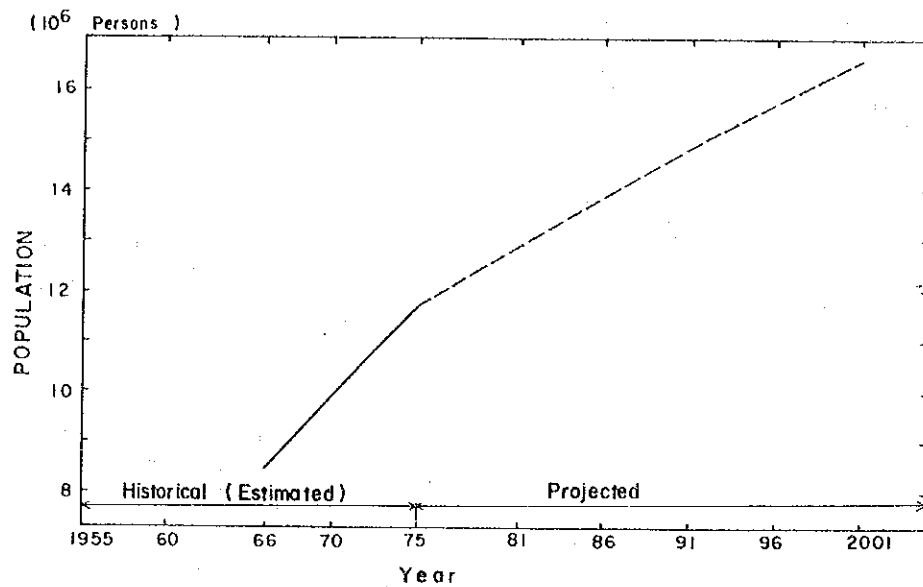
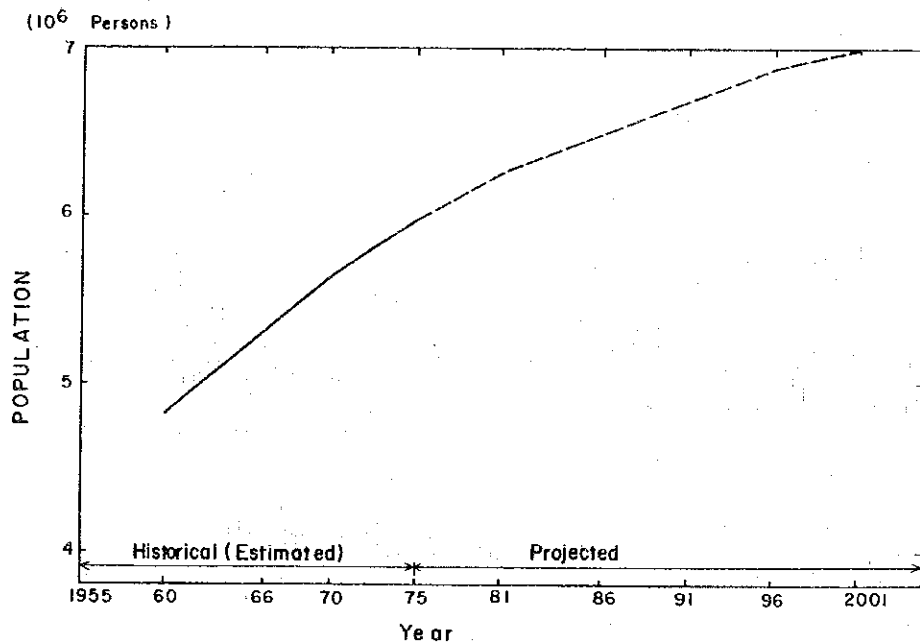


Fig. A 1 Historical and Projected Nation Population

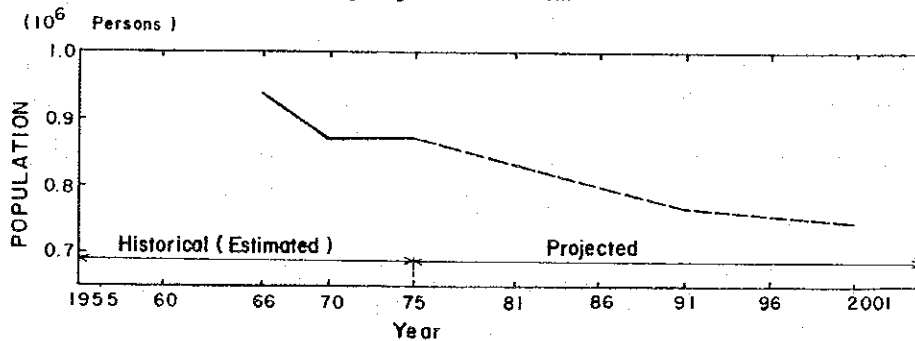
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Han River Basin



Nagdong River Basin



Seomjin River Basin

Fig. A 2 Historical and Projected Basin Population

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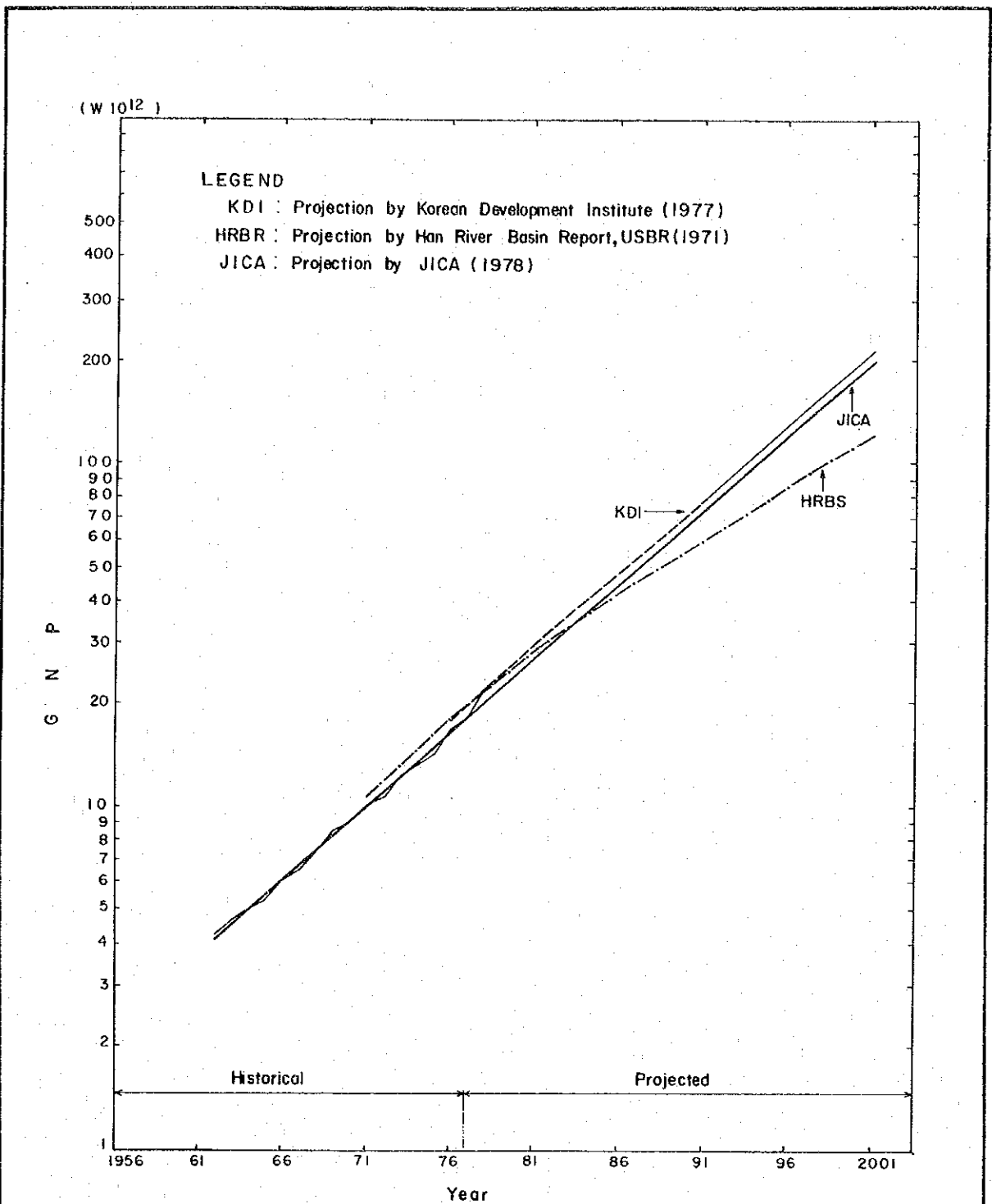
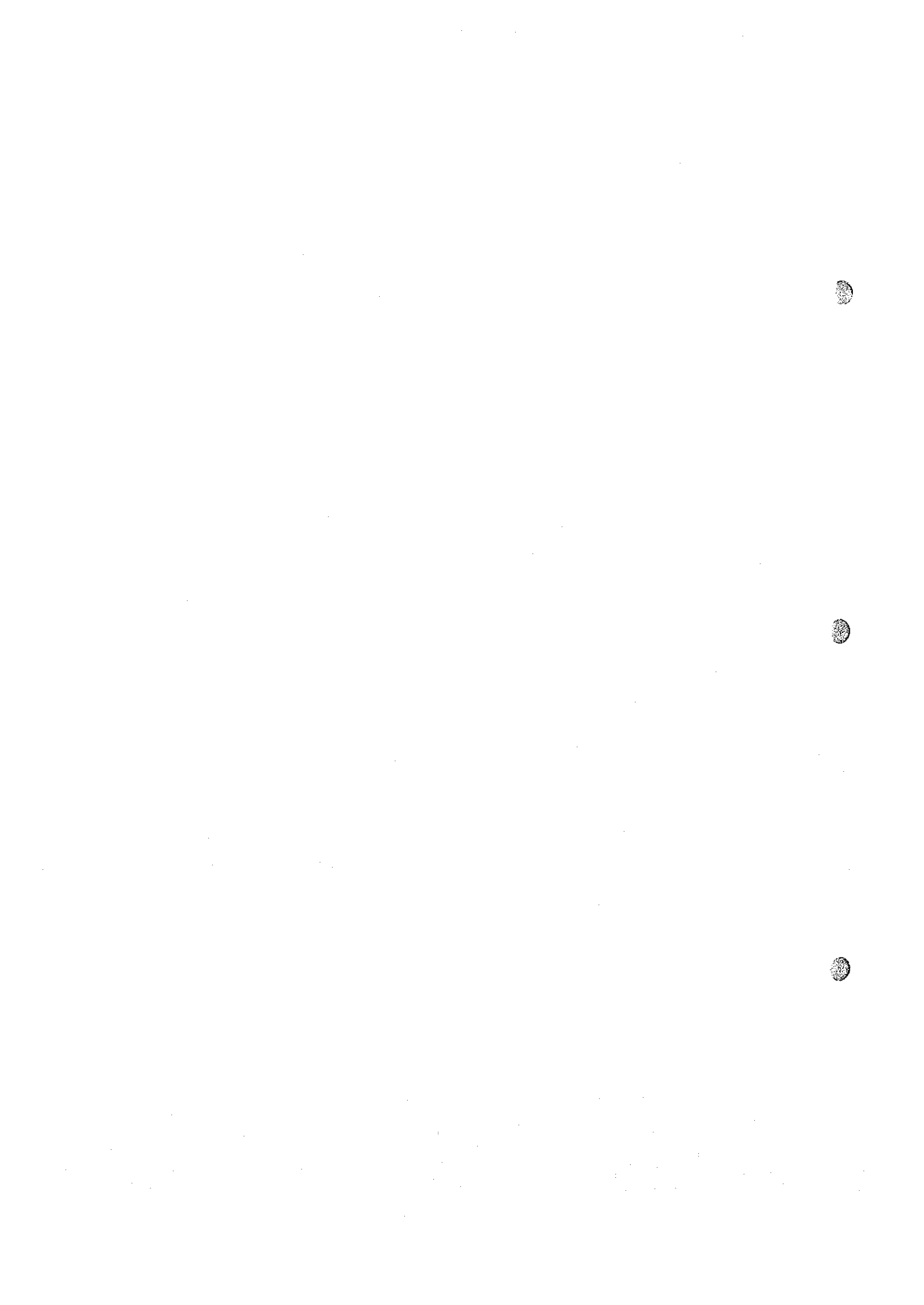


Fig. A 3 Historical and Projected GNP
(1978 constant price)

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A N N E X B

METEOROLOGY AND HYDROLOGY

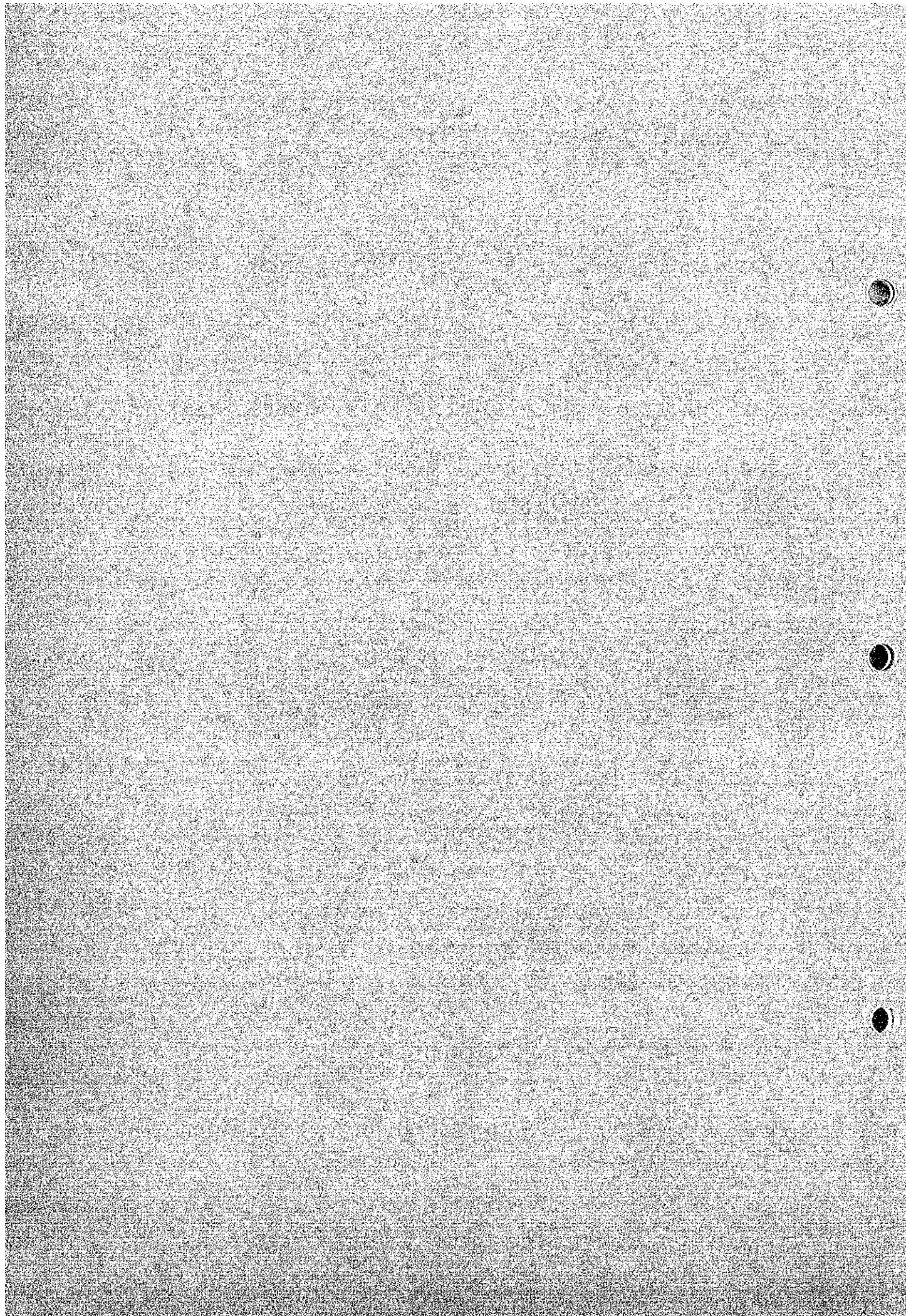


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B 1 INTRODUCTION

This ANNEX presents the meteorological and hydrological studies with regard to the Han, Nagdong and Seomjin basins as well as the 10 proposed damsites.

The study comprised collection and examination of the meteorological records, examination and setting of rating curves, filling-up and correction of the river flow data, analysis of drought year, sedimentation study.

The results of the study were used for water budget analysis in each basin, estimation of irrigation water requirement and analysis of the proposed dam schemes.

B 2 METEOROLOGY

B 2.1 General

Modern meteorological observation began at Incheon, Busan and Mogpo in 1904 and at Seoul and Daegu in 1907. Observatories have been increased thereafter and 24 standard meteorological stations have been established until the end of 1960's. Furthermore, 76 auxiliary stations were established at a stretch in 1972.

The records observed at these meteorological stations are reported in the Meteorological Yearbook published by the Central Meteorological Observatory.

B 2.2 Meteorological Data Relating Agriculture

The studied area about 400 km long in the north-south direction. Taking into account the regional difference in the agro-climatic conditions, the area was divided into 5 agricultural zones; the Han river basin, northern Nagdong river basin, central Nagdong river basin, southern Nagdong river basin and Seomjin river basin.

The meteorological stations at Seoul, Chupungryeong, Daegu, Busan and Gwangju were selected as representing each agricultural zone. Jeonju station was also selected for the Seomjin river basin.

Monthly mean precipitation, temperature, relative humidity, sunshine hours, wind velocity and pan evaporation at the selected stations are summarized in Table B 1. Monthly data mentioned above for each year from 1952 through 1976 are tabulated in Table B 2 through B 9 and daily rainfall record in 1967 and 1968 are tabulated in Tables B 10 and B 11. Those data were utilized to estimate the irrigation water requirement.

B 3 PRECIPITATION

B 3.1 General

The total number of rain gauging stations in Korea was 172 in 1961, but it was increased to 249 until 1976. The average coverage of one station is around 400 km². Out of those, 67 are ordinary gauging stations and 182 are automatic recording stations. Out of the total number of rain gauging stations, 155 stations are situated in the Han river, Nagdong river and Seomjin river basins. The name and location of the rain gauging stations in the three basins are shown in Fig. B 1.

B 3.2 Precipitation Records

The precipitation records at the 155 stations in the Han, Nagdong and Seomjin river basins were collected for a period of 15 years of 1962 through 1976. The annual precipitation of each station and mean monthly precipitation are tabulated in Tables B 12 and B 13, respectively, for each river basin. These data were used to estimate the average basin rainfall for the proposed dam schemes and run-off gauging stations.

The average annual rainfall in each river basin was calculated as follows;

Basin	Number of Stations	Average Annual Rainfall (1962 - 1976)
Han river	71	1,272 mm
Nagdong river	71	1,168 mm
Seomjin river	13	1,403 mm

The isohyetal map of the average annual rainfall of 1962 through 1976 is shown in Fig. B 2.

B 3.3 Annual Basin Rainfall

Out of 155 precipitation gauging stations tabulated in Table B 12,

the records at the following stations were used to calculate the annual basin rainfall of the proposed dam schemes.

Basin	Name of Dam	Selected Stations	Average Annual Basin Rainfall (1962-1976)
Han	Bamseonggol	Bupyeong, Bangsan, Hwacheon	1,276 mm
	Inje	Inje, Yongdaeri, Changchon, Seohwa, Girin	1,200 mm
	Hongcheon	Hongcheon, Naechon, Seomyeon, Duchon, Seoseog	1,340 mm
	Gujeol	Jeongseon, Imgye, Jinbu, Hoenggye	1,186 mm
	Dalcheon	Chungju, Sangmo, Sogrisan, Goesan, Cheongcheon	1,106 mm
	Ganhyeon	Ganhyeon, Hoengseong, Weonju, Cheongil	1,349 mm
Nagdong	Bonghwa	Jaesan, Docheon, Seog'po, Hyeondong, Seoghyeon, Hwangji	1,033 mm
	Imha	Yeongyang, Cheongsong, Gilan, Jinbo, Bunam	995 mm
	Hamyang	Unbong, Hamyang, Macheon, Sancheong	1,422 mm
Seomjin	Juam	Boseong, Dongbog, Bognae, Seoggog	1,382 mm

The annual basin rainfall of each proposed dam schemes are summarized in Table B 14.

Table B 15 shows the annual basin rainfall for the selected runoff gauging stations.

B 4.1 General

There are 25 river systems in Korea and 183 water level gauging stations have been established throughout the country as of 1976. Automatic recording water gauges were attached to 57 stations.

In the Han river, Nagdong river and Seomjin river basins, there are 102 water level gauging stations and their locations are shown in Fig. B 3.

B 4.2 Selection of Basic Gauging Stations

Basic gauging stations for each basin were selected for the water budget analysis and for the estimation of run-off at each proposed dam-site among the 102 existing water level gauging stations in view of location, accuracy and continuity of the record. The discharge record of some existing dams were also utilized for estimation of run-off at proposed damsite.

The selected basic gauging stations and existing dams are as follows:

Han river basin;

Goan gauging station,
Yeoju gauging station,
Chungju gauging station,
Jeongseon gauging station,
Goesan dam,
Cheongpyeong dam, and
Hwacheon dam.

Nagdong river basin;

Jindong gauging station,
Waegwan gauging station,
Imha gauging station, and
Changri gauging station.

Seomjin river basin;

Abrog gauging station.

The location of the selected basic gauging stations is shown in Fig. B 4.

B 4.3 Run-off Estimation at Basic Gauges

River run-off at the basic gauges was estimated from the water level record by applying the rating curve in principle and some corrections were made by the correlation between the records of adjacent stations and between rainfall and run-off.

The rating curves utilized are shown in Fig. B 5.

(1) Daily run-off at Jeongseon gauging station

The run-off at Jeongseon gauging station was initially calculated from the rating curve shown in Fig. 2-39 of the River and Stream Survey Report of the Republic of Korea, but it was found that the run-off during dry season were always greater than the basin rainfall, then the rating curve was examined and revised based on the stream flow measurement records for 1962 and 1963. Daily run-off at water level lower than 1.10 m was re-estimated.

(2) Run-off at Chungju gauging station

The run-off data at the Chungju gauge for a period of 1962 through 1972 was taken from the Feasibility Report of the Chungju Project prepared by ECI. After 1973 till 1976 the daily run-off was determined based on the daily water level records applying the rating curve attached in the Feasibility Report of the Chungju Project.

(3) Monthly run-off at Yeosu gauging station

Run-off at Yeosu gauge was determined for a period of 1962 through 1972 from the data shown in the Feasibility Report of Chungju Project, while for 1973 through 1976 the daily run-off

was determined based on the water level records applying the rating curve obtained from the daily run-off data for 1968 in the Annual Report.

However, it was found that the run-off at Yeosu was sometimes smaller than that of Chungju gauge.

Therefore, adding the discharge record of the Goesan power station, the correlation between the run-off at the Chungju gauge plus discharge of the Goesan power station and run-off at Yeosu were analyzed for each month from March to September. Monthly run-off at Yeosu gauge was revised based on the correlation thus established. The above correlations are shown in Fig. B 6.

(4) Run-off at Goan gauging station

There was a great difference in the annual run-off coefficients of each year, when comparison is made between the run-off from 1968 to 1976 based on the rating curves at Goan gauge and the run-off from 1956 to 1967 described in Chungju Feasibility Report. It was found that the run-off estimated based on the rating curves was much bigger than the one in the Chungju Report. Therefore, correction of run-off from 1968 to 1976 were made as follows;

a) Estimate of annual run-off

Correlation between the discharge of Cheongpyeong dam plus corrected run-off at Yeosu gauge and run-off at Goan gauge for 12 years period from 1956 to 1967 was established.

Then, annual run-off at Goan gauge from 1968 to 1976 was estimated based on the discharge of Cheongpyeong dam plus corrected run-off at Yeosu gauge from 1968 to 1976.

b) Estimate of monthly run-off

Monthly run-off of Goan gauge from 1968 to 1976 was estimated by allocating the annual run-off with the monthly ratio of the discharge of Cheongpyeong dam plus corrected run-off at Yeosu gauge for 9 years from 1968 to 1976.

c) Estimate of daily mean run-off in 1968

Daily mean run-off in 1968 was estimated by allocating the monthly run-off with the daily mean run-off ratio obtainable from the rating curve of the same year.

(5) Run-off at Imha gauging station

Run-off at Imha gauge was estimated from the daily water level record and rating curve obtained from the run-off measurement by ISWACO.

(6) Run-off at Waegwan and Jindong gauging stations

Daily run-off record estimated by ISWACO was adopted for the Waegwan and Jindong gauges.

(7) Run-off at Changri gauging station

Since the estimated run-off coefficient was abnormally high (126.4 %) for 1975 in the run-off data for Changri gauge, the correlation between annual basin rainfall and the annual run-off at Changri gauge was analyzed, and then annual run-off was connected to the annual basin rainfall. The monthly run-off was estimated from the annual run-off based on the run-off ratios of the respective months prior to correction. The correlation between the annual run-off and the annual basin rainfall of Changri gauge is indicated in Fig. B 6.

(8) Run-off at Abrog gauging station

The run-off at Abrog gauge was all calculated by rating curves, but since some abnormal run-off coefficients were calculated, the correction analysis was made from the specific run-off of the downstream Songjeong gauging station.

The monthly run-off at the basic gauges and inflow and outflow record at the existing dam are summarized in Table B 16 through B 28.

The mean monthly run-off of the three river basins estimated by the method described above for 15 years of 1962 through 1976 are tabulated as follows:

Unit: 10^6 m^3

	Han River Goan Gauging Station CA=23,613 km ²	Nagdong River Jindong Gauging Station CA=20,311 km ²	Seomjin River Abrog Gauging Station CA=1,684 km ²
Jan.	377.7	230.9	32.3
Feb.	406.4	265.9	45.9
Mar.	685.0	493.0	67.1
Apr.	1,683.0	867.4	117.9
May	1,216.8	800.7	130.2
June	830.8	685.3	118.6
July	4,793.5	2,959.5	458.8
Aug.	4,254.5	2,080.2	274.9
Sept.	2,881.8	1,688.9	221.1
Oct.	837.4	510.0	57.1
Nov.	636.3	370.9	40.7
Dec.	513.6	253.2	27.7
Annual	19,116.6	11,205.9	1,592.4
Annual mean (m ³ /s)	606.1	355.3	50.5
Specific run-off (m ³ /s/100 km ²)	2.57	1.75	3.00

B 4.4 Run-off at Proposed Damsite

The run-off at each proposed damsite was estimated from the run-off data at the basic gauges and discharge record of the existing dam by means of the ratio of catchment area and basin rainfall.

The catchment area and the annual mean basin rainfall of the proposed damsite and relating basic gauges and existing dams are as follows:

Name	Proposed Dam		Relating Basic Gauge & Existing Dam		
	Catchment Area (km ²)	Annual Rainfall (mm)	Name	Catchment Area (km ²)	Annual Rainfall (mm)
<u>Han River Basin</u>					
Bamseonggol	583	1,276			
Inje	1,043	1,200	Hwacheon dam	4,145	1,276
Hongcheon	1,473	1,340			
Gujeol	101	1,186	Jeongseon g.s.	1,425	1,133
Dalcheon	1,348	1,106	Yeoju g.s.	11,036	1,161
Dalcheon downstream			Chungju g.s.	6,657	1,241
Goesan dam	677	1,140	Goesan dam	671	1,072
Ganhyeon	1,180	1,349	Yeoju g.s. downstream Chungju g.s. & Goesan dam	3,708	1,215
<u>Nagdong River Basin</u>					
Bonghwa	1,135	1,033			
Imha	1,230	995	Imha g.s.	1,360	995
Hamyang	264	1,422	Changri g.s.	925	1,270
<u>Seomjin River Basin</u>					
Juam	1,010	1,382	Abrog g.s.	2,448	1,389
Juam downstream			Seomjinggang dam	763	1,440
Boseong & Dongbog dams	548	1,415	Boseong dam	275	1,387
			Dongbog dam	187	1,277
			Abrog g.s. downstream Seomjinggang dam	1,685	1,366

The procedure to estimate the run-off at each proposed damsite is described as follows:

(1) Bamseonggol

$$Q_B = Q_{Hw} \times \frac{583}{4,145} \times \frac{1,276}{1,276}$$

where, Q_B = monthly run-off at Bamseonggol dams site

Q_{Hw} = monthly inflow into Hwacheon dam

(2) Inje

$$Q_I = Q_{Hw} \times \frac{1,043}{4,145} \times \frac{1,200}{1,276}$$

where, Q_I = monthly run-off at Inje dams site

Q_{Hw} = same as the above

(3) Hongcheon

$$Q_{Hong} = Q_{Hw} \times \frac{1,473}{4,145} \times \frac{1,340}{1,276}$$

where, Q_{Hong} = monthly run-off at Hongcheon dams site

Q_{Hw} = same as the above

(4) Gujeol

$$Q_G = Q_J \times \frac{101}{1,425} \times \frac{1,186}{1,133}$$

where, Q_G = monthly run-off at Gujeol dams site

Q_J = monthly run-off at Jeongseong gauging station

(5) Dalcheon

$$Q_D = \left\{ Q_Y - Q_{Ch} - Q_{Goe} \right\} \times \frac{677}{3,708} \times \frac{1,140}{1,215} + Q_{Goe}$$

where, Q_D = monthly run-off at Dalcheon dams site

Q_Y = monthly run-off at Yeoju gauging station

Q_{Ch} = monthly run-off at Chungju gauging station

Q_{Goe} = monthly discharge of Goesan dam

(6) Ganhyeon

$$Q_{Ga} = \left\{ Q_Y - Q_{Ch} - Q_{Goe} \right\} \times \frac{1,180}{3,708} \times \frac{1,349}{1,215}$$

where, Q_{Ga} = monthly run-off at Ganhyeon damsite

Q_Y, Q_{Ch}, Q_{Goe} = same as the above

(7) Bonghwa

$$Q_B = Q_I \times \frac{1,135}{1,360} \times \frac{1,033}{995}$$

where, Q_B = monthly run-off at Bonghwa damsite

Q_I = monthly run-off at Imha gauging station

(8) Imha

$$Q_{Im} = Q_I \times \frac{1,230}{1,360} \times \frac{995}{995}$$

where, Q_{Im} = monthly run-off at Imha damsite

Q_I = monthly run-off at Imha gauging station

(9) Hamyang

$$Q_{Ham} = Q_{Cha} \times \frac{264}{925} \times \frac{1,422}{1,270}$$

where, Q_{Ham} = monthly run-off at Hamyang damsite

Q_{Cha} = monthly run-off at Changri gauging station

(10) Juam

$$Q_J = Q_A \times \frac{548}{1,685} \times \frac{1,415}{1,366} + Q_B$$

where, Q_J = monthly run-off at Juam damsite

Q_A = monthly run-off at Abrog gauging station

Q_B = monthly spillout from Boseong dam

Monthly run-off at the Bamseonggol, Inje and Hongcheon damsites could be easily calculated from the monthly inflow record into the Hwacheon dam. Gujeol was simply related with the Jeongseong gauging station. Bonghwa, Imha and Hamyang were also related with the Imha gauging station and Changri gauging station, respectively.

Monthly run-off at the Dalcheon, Ganhyeon and Juam damsites are tabulated in Table B 29 through B 31, respectively.

B 4.5 Annual Run-off Coefficient

The average annual run-off coefficient of each basic gauge and proposed damsite for 15 years of 1962 through 1976 was calculated as follows;

Basin	Site	Catchment Area (km ²)	Annual Basin Rainfall (mm)	Annual Run-off (10 ⁶ m ³)	Run-off Coefficient (%)
Han	Yeoju g.s.	11,036	1,161	8,600	67
	Goan g.s.	23,613	1,241	19,117	65
Nagdong	Waegwan g.s.	11,074	1,025	4,865	43
	Jindong g.s.	20,311	1,139	11,206	48
Seomjin	Abrog g.s.	1,684	1,389	1,595	68
Han	Bamseonggol	583	1,276	508.9	68
	Inje	1,043	1,200	856.2	68
	Hongcheon	1,473	1,340	1,350.3	68
	Gujeol	101	1,186	79.0	66
	Dalcheon	1,348	1,106	932.1	62
	Ganhyeon	1,180	1,349	944.5	59
Nagdong	Bonghwa	1,135	1,033	695.0	59
	Imha	1,230	995	725.5	59
	Hamyang	264	1,422	275.6	73
Seomjin	Juam	1,010	1,382	701.4	50

B 4.6 Drought Year

The Goan gauging station was selected as the basic one for analysis of drought year in the Han river basin. Similarly the Jindong gauging station and Abrog gauging station were selected for the Nagdong river and Seomjin river basins.

The drought year for each river basin was determined based on the smallest accumulated run-off from October to next June of the selected basic gauging stations, which were shown in Table B 22 for the Goan gauge, Table B 25 for the Jindong gauge and Table B 27 for the Abrog gauge.

One year from November, 1967 to October, 1968 was determined as the drought year for all the three basins. Water budget was calculated for this year, which is presented in ANNEX K.

B 5 SEDIMENTATION

Sedimentation in the proposed reservoirs was examined in the first stage of the study.

In the First Stage Survey Report, the results of measurements at existing dams were given, while studies have been made on design sediment load rates for dams under construction or being planned in Korea. These values are 300 to 800 m³/km²/yr.

The rate of sedimentation of the Soyanggang dam was estimated at 281 m³/km²/year as a result of measurements at Cheongpyeong reservoir. And according to the Geum River Improvement Plans, the results of measurements at 10 reservoirs of small catchment areas (1.25 to 14.8 km²) were 423 to 1,136 m³/km²/year in 12 to 35 years after completion.

The predicted sediment surfaces for the proposed reservoirs were determined for 100-year sedimentations based on the sediment load rates estimated in the First Stage Survey.

The sediment load rate, 100-year sedimentation, and predicted sediment elevation of each reservoir are shown below:

Proposed Damsite	Catchment Area (km ²)	Sediment Yield Rate (m ³ /km ² /year)	100-year Sediment Volume (10 ⁶ m ³)	Assumed Sediment Surface (El. m)
Bamseonggol	583	700	40.8	252
Inje	1,043	600	62.6	269
Hongcheon	1,473	500	73.6	74
Gujeol	101	600	6.0	718
Dalcheon	1,348	500	67.4	91
Gangyeon	1,180	500	59.0	82
Bonghwa	1,135	600	68.1	223
Imhwa	1,230	400	49.2	147
Hamyang	264	700	18.5	328
Juam	823 ^{/1}	400	33.0	78

^{/1} Catchment area 187 km² of Donbog dam is shut down.

REFERENCES

- B 1 HYDROLOGIC ANNUAL REPORT IN KOREA (1962 - 1976), MOC
- B 2 METEOROLOGICAL YEARBOOK (1952 - 1976), Central Meteorological Office
- B 3 HYDROLOGIC SURVEY REPORT OF KOREA, MOC, 1963
- B 4 HYDROLOGIC SURVEY REPORT OF KOREA, (RAINFALL EDITION, 1901 - 1961)
- B 5 REPORT ON COMPREHENSIVE SURVEY OF RIVERS IN KOREA, MOC & ISWACO
- B 6 ELECTRIC POWER YEARBOOK, KECO, 1968.

Table B 1 SUMMARY OF METEOROLOGICAL
OBSERVATION RECORD

	Precipitation	Temperature	Relative Humidity	Sunshine Hours	Wind Velocity	Pan Evaporation
	mm	°C	%	hr.	m/sec.	mm
1. Han River Basin						
1.1 Seoul (1954-1976)*						
Jan.	22	-4	66	165	2.5	37
Feb.	31	-1	65	165	2.7	46
Mar.	50	4	65	198	3.0	78
Apr.	97	11	64	200	3.0	114
May	91	17	65	228	2.6	153
June	138	21	74	184	2.2	142
July	402	24	83	121	2.3	115
Aug.	267	25	80	154	2.2	130
Sept.	176	20	74	175	2.0	108
Oct.	53	14	69	207	1.9	89
Nov.	44	7	68	152	2.3	57
Dec.	21	-1	66	146	2.4	40
Total	1,392					1,109
(Average)		(11)	(70)	(2,095)	(2.4)	
2. Nagdong River Basin						
2.1 Chupungryeong (1953-1976)*						
Jan.	29	-3	65	175	4.3	55
Feb.	36	0	65	174	4.0	63
Mar.	62	4	62	209	3.8	102
Apr.	94	11	62	215	3.3	137
May	89	17	62	248	3.0	180
June	131	21	72	204	2.4	159
July	293	24	82	162	2.0	136
Aug.	200	25	81	190	2.1	149
Sept.	132	19	79	176	2.1	113
Oct.	52	13	72	210	2.4	100
Nov.	49	6	69	173	2.8	68
Dec.	26	0	67	171	3.9	55
Total	1,193					1,317
(Average)		(11)	(70)	(2,307)	(3.0)	

Remarks; ()*: Observation period.

Table B 1 Continued (2)

	Precipitation mm	Temperature °C	Relative Humidity %	Sunshine Hours hr.	Wind Velocity m/sec.	Pan Evaporation mm
2.2 Daegu (1952-1976)*						
Jan.	20	-1	59	188	3.6	61
Feb.	30	1	61	177	3.5	65
Mar.	48	6	60	210	3.7	105
Apr.	79	13	63	205	3.6	133
May	77	18	64	224	3.2	169
June	111	22	70	191	3.2	167
July	244	26	77	164	3.1	156
Aug.	180	26	75	191	3.0	169
Sept.	123	21	75	167	2.7	114
Oct.	46	15	69	201	2.5	96
Nov.	37	8	67	177	2.9	67
Dec.	19	2	63	181	3.2	59
Total (Average)	1,014	(13)	(67)	(2,276)	(3.2)	1,361
2.3 Busan (1952-1976)*						
Jan.	27	2	52	191	4.8	79
Feb.	54	4	55	172	4.8	78
Mar.	83	8	59	198	4.8	104
Apr.	153	13	68	184	4.7	112
May	158	17	72	213	4.1	130
June	203	20	80	175	4.0	123
July	254	24	86	148	4.6	122
Aug.	197	26	81	208	4.4	152
Sept.	193	22	75	162	4.3	115
Oct.	61	17	64	196	4.0	114
Nov.	62	11	59	184	4.2	91
Dec.	32	5	53	193	4.5	84
Total (Average)	1,477	(14)	(67)	(2,224)	(4.4)	1,304

Table B 1 Continued (3)

	Precipitation mm	Temperature °C	Relative Humidity %	Sunshine Hours hr.	Wind Velocity m/sec.	Pan Evaporation mm
3. Seomjin River Basin						
3.1 Gwangju (1952-1976)*						
Jan.	34	0	73	163	2.3	48
Feb.	45	2	70	164	2.6	57
Mar.	66	6	68	207	2.7	94
Apr.	118	12	69	203	2.5	120
May	109	18	71	227	2.2	151
June	152	21	75	194	2.1	158
July	267	26	82	167	2.4	153
Aug.	211	26	79	216	2.1	165
Sept.	176	21	77	188	1.8	119
Oct.	57	15	73	215	1.7	100
Nov.	51	8	73	174	2.0	65
Dec.	33	3	72	157	2.1	49
Total (Average)	1,319	(13)	(74)	(2,275)	(2.2)	1,279
3.2 Jeonju (1952-1976)*						
Jan.	34	-1	73	149	1.2	36
Feb.	41	1	73	151	1.3	42
Mar.	64	5	71	196	1.5	74
Apr.	107	12	71	197	1.6	108
May	100	18	69	229	1.4	145
June	129	22	76	190	1.3	148
July	298	26	81	144	1.4	135
Aug.	237	26	80	196	1.2	146
Sept.	161	21	79	182	1.0	105
Oct.	58	14	75	205	1.0	86
Nov.	52	8	75	158	1.0	52
Dec.	30	2	74	143	1.1	38
Total (Average)	1,311	(13)	(75)	(2,140)	(1.2)	1,115

Table B 2 MONTHLY MEAN TEMPERATURE

Unit: °C

Seoul (1954-1976)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	--	--	--	--	--	--	--	--	--	--	--	--	--
1953	--	--	--	--	--	--	--	--	--	--	--	--	--
1954	-1.5	0.4	3.1	11.8	16.6	19.6	21.9	25.7	20.3	12.5	9.5	-2.7	11.4
1955	-5.6	-0.1	4.4	11.1	15.9	21.4	24.4	26.2	20.7	12.6	5.9	0.6	11.5
1956	-4.0	-3.4	3.7	9.5	15.1	19.7	24.3	24.8	20.4	12.8	3.2	-5.2	10.1
1957	-3.5	-4.3	0.0	10.4	16.9	20.1	22.4	24.1	18.9	12.5	8.4	-0.5	10.5
1958	-6.0	-0.8	3.6	10.9	16.3	22.3	25.6	23.8	19.8	12.7	6.7	4.0	11.6
1959	-5.1	2.4	6.0	10.2	17.9	20.4	24.4	25.8	20.8	14.8	5.8	1.1	12.0
1960	-3.3	1.7	6.7	10.6	16.5	20.6	24.8	26.2	20.8	15.1	7.1	-1.9	12.1
1961	-5.1	-0.8	5.3	11.4	16.9	21.7	26.1	26.6	21.2	15.5	8.9	-0.5	12.3
1962	-3.2	-0.5	3.1	9.7	17.0	20.8	25.8	25.1	20.0	13.3	6.4	1.2	11.6
1963	-9.0	-2.2	5.3	11.1	16.7	20.9	24.3	25.4	20.2	13.2	6.6	1.0	11.1
1964	0.0	-3.5	3.8	13.9	18.2	21.1	24.5	26.0	20.0	13.8	6.4	0.4	12.1
1965	-4.3	-1.3	2.7	10.2	17.3	22.1	24.1	24.4	20.8	14.8	7.0	-2.0	11.3
1966	-4.7	0.1	4.8	11.7	18.3	20.5	23.6	26.7	19.7	14.4	5.9	-3.0	11.5
1967	-4.5	-2.5	4.7	11.8	19.2	21.3	25.5	26.7	20.7	14.5	6.5	-4.9	11.6
1968	-4.0	-4.5	4.4	12.6	17.2	21.0	24.6	24.9	20.9	13.0	7.6	3.1	11.7
1969	-3.5	-2.7	2.9	10.6	16.4	20.0	24.0	24.8	20.8	13.9	5.0	-2.1	10.8
1970	-4.8	-0.2	0.4	12.1	18.7	20.4	23.0	25.9	21.2	14.9	5.7	-1.9	11.3
1971	-2.5	-0.7	2.1	11.2	16.6	21.6	23.9	24.6	20.6	13.0	8.7	-1.2	11.5
1972	0.8	-0.6	5.3	11.4	16.4	21.7	25.6	23.0	19.0	13.8	5.2	0.6	11.9
1973	0.4	0.6	4.5	12.3	17.4	21.4	26.8	25.9	20.3	13.0	4.7	-3.0	12.0
1974	-2.5	-2.1	3.7	10.7	16.7	19.7	23.5	25.1	20.6	12.6	5.4	-0.6	11.1
1975	-2.7	-0.8	4.4	13.3	16.7	21.4	24.9	27.0	22.6	15.4	9.0	-1.6	12.5
1976	-3.9	2.8	4.8	11.3	16.7	21.3	23.1	23.7	19.9	13.7	3.5	0.4	11.4
Ave.	-3.6	-1.0	3.9	11.3	17.0	20.9	24.4	25.3	20.4	13.7	6.5	-0.8	11.5

Table B 2 Continued (2)

Chupungryeong (1953-1976)													Unit: °C
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	--	--	--	--	--	--	--	--	--	--	--	--	--
1953	-3.9	-1.6	4.8	10.1	16.5	19.9	24.7	24.5	19.8	14.5	5.5	1.9	11.4
1954	-0.5	0.8	4.2	11.8	16.3	18.1	21.7	25.4	19.7	11.7	9.3	-0.7	11.5
1955	-4.1	1.0	5.2	11.5	16.4	21.5	24.7	24.3	19.4	11.9	6.0	1.7	11.6
1956	-2.5	-2.4	4.2	10.2	15.3	19.4	24.3	23.1	18.9	12.4	3.6	-3.2	10.3
1957	-1.4	-3.9	1.1	10.9	17.0	19.5	22.6	23.3	17.3	12.5	7.9	0.8	10.6
1958	-4.2	0.4	5.0	11.5	16.2	22.0	24.6	22.5	18.9	11.9	7.1	4.1	11.7
1959	-3.5	2.5	6.4	10.7	17.7	20.5	24.5	24.6	19.9	13.9	6.3	1.6	12.1
1960	-2.5	1.9	7.2	10.7	16.4	20.8	25.4	25.5	19.5	13.5	7.0	-0.9	12.0
1961	-4.0	-0.6	5.4	12.2	16.9	21.0	26.0	25.6	20.6	14.7	8.2	0.3	12.2
1962	-2.5	0.2	3.7	10.1	17.8	20.7	24.9	24.6	18.9	12.4	5.7	2.0	11.5
1963	-7.0	-2.0	5.4	10.8	16.4	19.7	24.3	24.5	19.0	11.9	6.7	1.6	10.9
1964	0.1	2.7	4.3	13.1	17.7	20.6	25.3	25.8	19.9	13.1	6.7	0.8	12.5
1965	-3.6	-0.9	3.3	10.3	17.5	21.6	23.2	24.8	19.5	14.3	7.2	-1.1	11.3
1966	-3.1	0.7	4.9	11.2	17.4	20.6	23.9	26.1	18.7	13.7	5.8	-1.7	11.5
1967	-3.8	-1.8	5.0	11.7	19.3	21.6	24.9	26.7	19.2	13.3	6.2	-3.5	11.6
1968	-2.5	-4.0	4.7	12.6	16.9	21.4	24.5	23.8	19.4	11.9	6.7	3.3	11.6
1969	-2.7	-2.3	3.0	11.2	17.0	20.1	23.3	24.0	19.5	12.3	4.6	-1.5	10.7
1970	-4.2	0.4	0.8	11.3	17.3	19.6	23.2	24.9	20.3	13.7	4.9	-0.4	11.0
1971	-2.5	-1.2	2.4	11.6	16.9	20.9	24.7	23.6	19.4	11.9	7.4	-0.4	11.2
1972	0.6	-0.3	4.9	11.3	15.4	21.1	24.5	23.2	18.1	13.0	5.3	0.2	11.4
1973	0.1	0.9	4.5	12.7	16.6	20.5	26.3	26.1	19.0	12.2	4.9	-2.1	11.8
1974	-2.7	-2.0	3.5	11.3	17.0	19.9	21.9	24.6	18.8	12.6	5.0	-0.5	10.8
1975	-2.0	-0.7	4.3	12.3	15.9	20.7	24.3	25.2	21.3	14.1	8.1	-0.5	11.9
1976	-3.1	2.4	4.6	10.7	15.9	20.3	22.2	23.6	18.2	12.9	3.8	0.2	11.0
Ave.	-2.7	0.4	4.3	11.3	16.8	20.5	24.2	24.6	19.3	12.9	6.2	0.0	11.4

Table B 2 Continued (3)

Daegu (1952-1976)													Unit: °C
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	-0.6	-0.7	5.0	12.7	17.6	22.3	25.1	25.7	20.2	13.6	9.0	-0.3	12.5
1953	-3.1	-0.1	6.7	11.5	17.3	20.8	25.7	26.2	20.9	15.8	6.7	3.2	12.6
1954	0.9	2.4	6.0	12.7	17.0	19.0	22.6	26.6	21.4	12.9	10.4	1.5	12.8
1955	-2.6	2.3	7.0	12.6	18.0	22.7	26.3	25.4	20.7	13.3	7.0	2.8	13.0
1956	-0.9	-0.4	5.8	11.5	16.6	20.5	24.8	24.4	20.2	13.8	4.9	-1.7	11.6
1957	0.4	-1.0	3.2	12.4	17.9	20.6	23.7	24.3	18.7	14.2	9.2	2.1	12.1
1958	-2.5	1.8	6.4	12.5	17.5	22.9	25.6	23.8	20.3	13.3	8.8	5.2	13.0
1959	-1.7	4.1	8.0	12.3	18.5	21.7	26.1	25.9	21.4	15.4	8.2	2.7	13.6
1960	-1.1	3.4	8.2	11.9	17.3	22.4	26.5	27.0	20.8	14.9	8.4	0.8	13.4
1961	-2.4	0.9	7.2	13.2	17.9	21.8	26.9	26.7	21.9	16.5	9.4	1.7	13.5
1962	-1.0	1.6	5.6	11.7	18.9	21.5	25.8	26.0	20.3	14.2	7.4	3.3	12.9
1963	-4.9	-0.5	6.7	11.6	16.9	19.5	25.6	25.6	20.3	13.7	8.0	2.9	12.1
1964	1.6	-0.6	6.0	12.9	18.8	21.8	27.1	28.0	21.2	14.5	8.0	2.1	13.4
1965	-1.9	0.7	5.2	11.4	18.6	22.6	24.6	26.4	20.7	15.3	8.8	0.4	12.7
1966	-1.3	2.6	6.6	12.3	17.9	21.3	25.3	27.9	19.7	14.9	7.3	-0.1	12.9
1967	-2.3	0.3	6.9	12.6	20.0	22.4	26.1	28.6	20.7	14.8	7.6	-1.9	13.0
1968	-1.0	-1.9	6.6	13.3	17.6	22.6	25.8	25.1	20.8	13.5	8.3	5.1	13.0
1969	-0.7	-0.3	4.8	12.6	18.3	22.3	25.0	26.2	21.0	13.9	6.6	0.2	12.5
1970	-2.2	2.5	3.3	12.4	18.3	21.0	24.7	26.5	22.2	15.6	6.9	1.3	12.7
1971	-0.4	0.9	4.9	12.8	18.7	22.1	26.5	25.1	20.9	13.8	9.0	1.3	13.0
1972	2.7	2.4	6.8	12.5	16.7	22.5	25.6	24.8	19.8	14.7	7.2	1.6	13.1
1973	2.1	3.0	6.7	14.3	18.4	22.1	28.5	28.2	21.2	14.0	6.8	-0.4	13.7
1974	-1.0	0.3	5.7	13.2	18.5	21.9	22.6	26.5	20.9	14.5	6.6	1.6	12.6
1975	-0.3	1.2	6.5	13.3	17.4	21.8	26.0	26.6	23.1	15.6	9.6	1.4	13.5
1976	-1.4	3.9	6.5	12.2	17.5	21.7	23.9	25.7	19.8	14.8	5.4	1.4	12.6
Ave.	-1.0	1.2	6.1	12.5	17.9	21.7	25.5	26.1	20.8	14.5	7.8	1.5	12.9

Table B 2 Continued (4)

Busan (1952-1976)													Unit: °C
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	2.2	1.9	6.8	13.0	17.2	20.1	23.8	25.3	21.1	16.2	12.7	3.5	13.7
1953	0.8	3.3	8.2	12.4	16.3	19.0	23.8	25.6	21.8	18.4	10.1	6.8	13.9
1954	4.4	5.2	7.8	12.9	16.7	18.1	21.4	25.8	22.4	15.6	13.7	4.8	14.1
1955	0.6	5.8	8.5	13.0	16.9	20.8	24.4	24.6	21.9	16.0	10.1	6.6	14.1
1956	2.6	2.1	6.7	11.8	16.3	18.7	23.5	23.8	21.1	16.6	8.5	1.6	12.8
1957	3.7	1.6	5.5	12.6	17.2	19.0	22.4	23.8	20.6	16.4	12.5	5.8	13.4
1958	1.2	5.2	7.9	13.0	16.9	20.8	24.2	23.9	21.8	15.9	11.4	8.7	14.2
1959	1.0	6.8	9.3	12.8	17.2	20.1	24.3	25.7	22.4	18.1	11.8	5.7	14.6
1960	2.2	6.1	9.6	12.6	17.1	20.4	24.7	26.9	22.1	17.2	12.1	3.7	14.6
1961	1.2	3.7	8.9	13.1	17.4	20.2	25.5	26.3	23.3	18.6	12.6	5.1	14.7
1962	1.3	4.8	7.7	12.3	17.9	19.6	23.5	24.7	21.4	16.4	10.2	6.7	13.9
1963	-2.0	2.0	7.3	11.5	15.4	18.3	23.8	25.5	21.1	15.9	11.5	6.3	13.1
1964	5.1	1.8	7.9	12.7	18.0	20.1	24.6	27.0	22.0	17.2	11.2	5.7	14.4
1965	1.9	3.4	6.7	11.2	17.2	20.1	22.8	25.4	21.3	17.1	12.1	3.9	13.6
1966	1.8	5.3	8.2	12.4	17.4	19.8	23.7	27.3	21.3	17.3	1.4	3.1	13.3
1967	1.3	2.5	8.4	12.7	18.4	21.3	24.5	27.4	21.9	17.2	10.9	11.0	14.8
1968	1.5	0.1	7.7	13.3	16.1	19.9	23.7	24.5	21.5	15.7	11.8	8.0	13.7
1969	2.3	2.7	6.2	12.1	17.2	19.9	23.3	25.6	21.9	16.2	9.6	3.5	13.4
1970	1.0	5.0	4.7	11.9	17.3	19.1	22.9	26.1	22.6	17.2	9.9	4.3	13.5
1971	2.1	3.2	6.3	12.8	17.4	20.3	24.8	24.8	21.7	16.2	12.2	5.2	13.9
1972	6.0	4.4	8.1	12.6	16.2	20.4	23.9	24.5	20.7	16.8	10.1	5.4	14.1
1973	4.9	5.2	8.0	14.1	17.4	20.4	26.2	27.1	21.7	16.4	9.6	2.4	14.5
1974	2.8	3.0	7.0	13.1	17.3	19.8	21.4	25.2	22.0	16.9	10.4	4.8	13.6
1975	2.3	3.3	8.2	13.0	16.7	20.3	24.7	26.7	24.0	17.8	12.3	4.6	14.5
1976	1.5	6.5	8.0	12.8	16.6	19.7	22.5	25.2	20.6	16.9	8.6	5.2	13.7
Ave.	2.1	3.8	7.6	12.6	17.0	19.8	23.8	25.5	21.8	16.8	10.7	5.3	13.9

Table B 2 Continued (5)

Gwangju (1952-1976)													Unit: °C
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	0.2	-0.1	4.8	12.3	18.0	21.7	26.2	26.0	20.5	13.6	10.1	1.2	12.9
1953	-1.3	1.0	6.2	10.4	17.3	21.0	26.3	27.1	21.2	15.8	7.5	3.8	13.0
1954	1.6	3.5	5.1	13.2	17.2	20.1	23.7	27.3	21.4	13.4	10.4	1.9	13.2
1955	-1.8	2.7	6.8	12.7	17.2	22.6	25.9	26.4	22.0	13.5	7.3	3.6	13.2
1956	0.1	-0.2	6.2	11.3	15.9	21.2	26.2	25.1	21.0	13.9	5.8	0.3	12.2
1957	1.1	-0.1	3.1	11.8	17.7	20.6	24.5	24.9	18.9	13.4	9.2	3.4	12.4
1958	-1.5	1.8	6.1	12.5	17.0	22.7	26.4	24.6	21.3	14.0	8.6	5.4	13.2
1959	-2.1	5.4	8.4	11.4	17.8	21.6	26.1	27.4	22.0	15.8	8.3	4.0	13.8
1960	0.1	3.2	8.5	10.9	16.6	21.7	26.4	26.6	21.3	15.5	9.2	1.9	13.5
1961	-1.3	1.3	7.0	12.4	17.4	22.1	26.9	26.9	22.3	16.7	10.1	2.8	13.7
1962	-0.7	2.1	5.0	10.5	17.4	21.1	25.4	25.5	21.0	14.1	8.5	3.9	12.8
1963	-4.5	-1.4	6.3	12.6	17.5	21.0	25.1	25.9	20.5	14.0	8.7	3.7	12.5
1964	2.2	-0.1	5.9	15.8	18.4	21.4	26.4	27.2	22.1	15.3	8.4	3.2	13.9
1965	-0.8	1.0	4.1	11.1	17.9	21.7	24.5	25.9	20.5	15.0	9.3	1.7	12.7
1966	-0.5	2.7	6.9	12.7	18.1	21.3	25.1	27.7	21.1	15.9	8.3	0.8	13.3
1967	-1.3	0.3	6.2	12.9	19.5	22.6	25.9	28.2	22.1	15.4	8.2	-1.0	13.3
1968	-0.3	-1.8	5.7	12.9	17.5	21.8	25.8	25.6	21.3	13.9	9.5	6.0	13.2
1969	0.0	1.4	4.6	12.4	17.4	20.2	24.5	25.9	21.7	14.1	7.3	1.2	12.6
1970	-1.6	2.6	2.8	12.0	18.0	20.6	24.1	27.2	22.4	16.0	7.3	2.3	12.8
1971	-0.3	1.3	4.3	12.4	17.6	21.6	25.8	25.6	21.1	13.4	9.3	2.5	12.9
1972	3.9	1.7	6.5	12.4	16.7	21.7	25.3	24.7	20.3	14.9	8.2	2.5	13.2
1973	2.6	3.0	5.8	13.9	17.3	22.1	27.0	27.1	20.6	14.4	7.0	0.4	13.4
1974	-0.2	0.9	5.2	12.3	17.6	20.3	23.5	26.1	20.6	14.3	7.4	2.4	12.5
1975	0.1	1.3	5.4	13.2	16.9	21.2	25.7	27.1	23.6	16.3	10.2	1.5	13.5
1976	-1.3	4.5	6.1	12.0	16.5	21.1	23.6	25.8	20.0	14.8	6.0	2.3	12.6
Ave.	-0.3	1.5	5.7	12.3	17.5	21.4	25.5	26.3	21.2	14.7	8.4	2.5	13.1

Table B 2 Continued (6)

Jeonju (1952-1976)													Unit: °C
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	-0.3	-1.3	4.2	11.9	17.8	21.9	26.2	25.5	20.2	13.1	9.4	0.6	12.4
1953	-2.3	-0.2	5.7	10.2	17.5	20.7	26.2	26.6	20.9	15.7	6.9	3.0	12.6
1954	0.6	2.8	4.5	12.3	17.0	20.3	23.6	26.8	21.1	13.1	10.3	0.5	12.7
1955	-2.7	2.2	6.0	12.6	16.6	22.2	25.9	26.3	21.3	13.2	7.0	2.9	12.8
1956	-1.3	-1.1	5.6	11.1	15.4	21.1	26.0	25.1	20.7	13.4	5.1	-1.2	11.7
1957	-0.1	-1.0	2.0	11.2	17.1	20.1	24.3	24.7	18.3	13.2	9.0	2.4	11.8
1958	-2.3	1.2	5.4	12.0	16.5	22.4	26.3	24.4	20.5	13.5	7.7	5.0	12.7
1959	-2.3	4.4	7.7	11.0	17.8	21.6	26.0	27.1	21.6	15.1	6.9	2.9	13.3
1960	-0.5	2.7	8.2	11.1	16.8	21.9	26.6	27.0	21.4	15.2	8.4	1.2	13.3
1961	-1.8	-0.5	6.4	12.4	17.6	22.3	27.3	27.4	22.4	16.2	9.6	2.2	13.5
1962	-1.4	1.5	4.7	10.4	17.6	21.4	26.3	25.8	20.9	13.5	8.0	3.2	12.7
1963	-5.2	-1.6	6.2	12.4	17.7	21.4	25.6	25.4	20.7	13.6	8.1	3.2	12.3
1964	1.3	-0.9	5.4	16.2	18.3	21.7	26.8	27.5	21.6	14.6	7.7	2.3	13.5
1965	-1.6	0.4	3.9	11.1	18.3	22.1	25.1	26.3	20.9	15.2	9.1	1.3	12.7
1966	-1.3	2.2	6.8	12.3	18.3	21.8	25.5	27.5	20.9	15.6	8.1	-0.3	13.1
1967	-2.1	-0.3	5.8	12.9	19.7	22.7	26.4	28.0	21.6	14.6	7.5	-1.6	12.9
1968	-1.1	-2.7	5.3	12.8	17.7	21.8	25.9	25.5	20.9	13.4	9.0	5.7	12.9
1969	-1.2	0.4	4.0	12.5	17.5	20.7	25.0	26.4	21.7	13.8	6.7	0.9	12.4
1970	-2.5	1.7	2.1	12.1	18.5	21.2	24.9	27.1	22.5	15.6	6.7	1.4	12.6
1971	-1.2	0.7	4.0	11.9	18.2	22.3	26.2	25.8	21.3	13.1	8.9	1.3	12.7
1972	2.8	1.0	5.9	12.7	16.9	22.1	25.7	24.7	20.0	14.6	7.5	1.9	13.0
1973	1.5	2.0	5.2	13.8	17.4	22.1	27.7	22.5	20.7	13.7	6.3	-0.6	12.7
1974	-1.3	0.0	4.9	12.6	17.7	20.4	23.9	26.4	20.6	13.7	6.5	1.3	12.2
1975	-0.5	0.4	5.1	13.2	16.9	21.8	25.7	27.5	23.3	15.8	9.7	0.3	13.3
1976	-2.0	3.9	5.6	12.0	16.9	21.5	23.9	26.1	20.0	14.5	5.4	1.7	12.5
Ave.	-1.2	0.7	5.2	12.2	17.5	21.6	25.7	26.1	21.0	14.3	7.8	1.7	12.7

Table B 3 MONTHLY MEAN MAXIMUM TEMPERATURE

Seoul (1954-1976)

Unit: °C

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	-	-	-	-	-	-	-	-	-	-	-	-	-
1953	-	-	-	-	-	-	-	-	-	-	-	-	-
1954	2.5	5.1	8.6	18.4	23.1	24.6	26.2	30.3	25.3	18.4	14.8	1.5	16.6
1955	-1.0	5.2	9.5	16.3	22.4	27.3	28.4	31.9	26.2	18.4	10.7	4.9	16.7
1956	0.4	1.4	8.0	14.6	21.5	24.6	28.1	29.8	25.5	19.2	8.4	-1.1	15.0
1957	0.5	-0.2	4.7	16.6	23.5	26.0	26.3	23.9	25.7	18.6	13.7	3.4	15.2
1958	-1.9	3.6	9.1	16.2	22.9	29.0	30.5	28.4	25.0	18.4	11.3	8.3	16.7
1959	0.7	6.7	10.8	15.8	23.9	25.6	28.8	31.1	25.6	20.9	10.6	4.8	17.0
1960	0.6	6.4	12.0	16.7	21.9	25.4	28.9	31.2	25.4	21.1	11.7	2.3	17.0
1961	-1.2	3.8	11.0	17.4	22.9	26.7	30.1	31.0	26.2	20.8	13.6	3.5	17.2
1962	1.0	4.2	7.9	15.1	23.8	26.4	30.5	29.2	24.7	19.1	10.5	5.5	16.5
1963	-4.8	2.4	11.4	15.7	21.8	26.0	28.0	30.1	25.5	19.5	11.3	5.1	16.0
1964	3.8	0.4	8.5	18.6	24.2	26.5	28.3	30.4	24.6	19.3	11.0	4.7	16.7
1965	-0.2	3.2	7.8	15.8	23.4	28.7	28.3	28.4	26.7	20.9	11.3	2.4	16.4
1966	0.1	4.8	9.2	17.6	23.7	25.4	26.9	31.2	24.6	19.5	10.7	1.3	16.2
1967	0.3	1.5	9.7	17.3	25.7	26.3	29.6	30.5	26.0	20.4	11.4	-1.1	16.5
1968	0.1	0.7	9.6	18.8	22.8	26.7	28.5	29.5	26.4	18.5	12.7	7.2	16.8
1969	0.4	0.9	7.7	16.0	21.7	25.5	27.7	28.9	25.2	19.5	9.4	2.2	15.4
1970	0.1	4.5	4.8	18.3	24.6	25.1	26.5	29.9	26.0	20.4	10.4	2.9	16.1
1971	1.7	3.5	6.6	17.0	22.1	26.0	27.4	28.6	25.2	18.7	13.4	2.8	16.1
1972	4.5	3.0	10.3	16.7	21.1	27.4	30.0	27.1	24.0	19.2	9.3	4.7	16.4
1973	4.2	5.2	10.0	17.6	22.9	26.1	31.2	29.8	25.0	18.2	9.3	1.7	16.8
1974	2.5	1.9	8.9	15.8	22.1	25.1	27.2	29.4	25.8	17.9	10.5	3.7	15.9
1975	1.8	4.0	9.7	19.3	22.2	26.7	28.8	31.9	27.1	20.6	13.8	2.8	17.4
1976	0.7	7.1	10.6	17.0	22.7	26.9	27.7	27.6	25.3	19.0	8.0	4.6	16.4
Ave.	0.7	3.4	9.0	16.9	22.9	26.3	28.4	29.6	25.5	19.4	11.2	3.4	16.4

Table B 3 Continued (2)

<u>Chupungryeong (1953-1976)</u>													Unit: °C
<u>Year</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Annual</u>
1952	--	--	--	--	--	--	--	--	--	--	--	--	--
1953	0.5	3.1	10.7	17.4	22.5	24.7	29.1	29.5	26.2	21.7	11.1	6.2	16.9
1954	3.3	6.0	11.1	18.6	22.6	22.6	25.6	30.5	25.4	17.8	15.6	3.8	16.9
1955	0.8	7.1	11.0	18.1	23.4	27.6	29.1	29.9	24.7	17.9	11.1	6.4	17.3
1956	2.1	2.3	8.9	16.0	21.3	24.5	28.6	28.1	24.0	19.1	9.1	1.2	15.4
1957	2.4	1.3	6.3	17.3	23.7	25.0	25.9	27.6	24.1	19.2	13.8	5.1	16.0
1958	-0.2	5.3	11.4	17.4	23.1	29.0	28.8	26.6	23.9	17.6	11.8	8.5	16.9
1959	0.5	6.4	12.0	16.5	23.9	26.1	29.1	29.7	24.4	21.1	11.5	5.4	17.2
1960	1.9	7.3	13.0	16.9	22.2	26.2	30.1	31.4	24.5	19.8	12.7	3.2	17.4
1961	0.4	4.4	11.0	18.6	23.1	26.4	30.5	30.2	25.4	19.9	12.8	5.2	17.3
1962	1.2	5.0	9.5	16.0	25.0	27.1	29.7	29.4	23.6	19.1	10.2	6.8	16.9
1963	-3.4	3.0	11.9	15.9	21.8	24.6	28.3	29.3	24.5	19.2	12.4	6.2	16.1
1964	4.3	1.1	10.2	17.9	24.0	26.2	30.0	31.0	24.5	18.6	11.8	5.9	17.1
1965	1.3	3.9	9.0	16.2	23.6	27.8	26.9	29.9	25.7	20.8	12.1	4.0	16.8
1966	2.2	6.7	9.5	17.2	23.6	26.3	28.0	30.8	23.5	18.9	12.0	2.9	16.8
1967	0.2	2.7	11.0	17.1	25.9	27.4	29.3	31.6	25.0	19.8	11.2	0.7	16.8
1968	1.6	1.1	10.7	19.4	22.6	27.8	29.1	28.6	25.2	17.5	12.3	8.0	17.0
1969	1.2	1.5	8.6	17.1	23.1	26.2	27.7	28.8	24.2	19.1	10.3	3.3	15.9
1970	1.5	5.9	6.3	17.6	22.9	24.3	27.6	29.1	24.8	20.2	11.3	4.5	16.3
1971	2.2	3.3	7.8	18.4	23.6	25.7	29.3	27.9	25.1	18.4	13.8	4.9	16.7
1972	5.6	3.7	10.4	17.3	21.3	27.5	29.4	28.1	24.0	19.5	10.3	5.4	16.8
1973	4.7	6.0	11.0	18.7	22.2	26.3	32.0	31.6	24.8	17.8	10.5	3.0	17.4
1974	3.4	2.9	9.2	17.6	23.0	25.8	25.4	29.9	25.3	18.7	11.2	4.5	16.4
1975	2.3	4.1	10.2	18.4	21.9	26.1	29.0	30.6	26.4	19.5	13.3	3.8	17.1
1976	2.7	7.3	10.4	17.0	22.3	25.5	26.2	27.7	24.2	19.2	9.2	5.2	16.4
Ave.	1.8	4.2	10.0	17.4	23.0	26.1	28.5	29.5	24.7	19.2	11.7	4.8	16.7

Table B 3 Continued (3)

Daegu (1952-1976)													Unit: °C
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	4.1	4.3	10.5	19.1	24.5	29.1	30.6	31.5	25.3	20.7	14.7	4.9	18.3
1953	2.2	5.0	13.1	19.0	23.7	25.7	30.4	31.5	27.2	23.0	12.6	7.8	18.4
1954	4.9	7.9	12.5	18.9	23.4	24.0	26.6	31.9	26.6	19.0	16.9	6.0	18.2
1955	2.9	8.3	12.2	19.0	25.0	28.8	31.0	31.3	26.0	19.7	13.4	8.3	18.8
1956	4.5	5.5	10.6	17.7	23.2	25.8	29.6	29.3	25.3	20.7	11.4	3.6	17.3
1957	5.1	4.2	9.3	19.4	25.0	26.4	27.4	28.8	25.3	21.4	15.3	7.4	17.9
1958	2.3	7.4	13.2	18.8	24.7	30.0	30.3	28.1	25.4	19.1	13.8	10.5	18.6
1959	3.2	8.4	13.9	18.4	25.4	28.0	31.4	30.8	26.0	22.8	13.9	7.2	19.1
1960	4.0	9.7	14.1	18.5	23.5	28.6	31.9	33.1	25.9	21.1	14.5	5.8	19.2
1961	2.7	7.0	13.2	20.0	24.3	27.5	31.4	31.6	27.0	21.9	14.6	6.9	19.0
1962	3.9	7.7	12.3	18.3	27.0	28.5	30.8	31.7	25.5	21.2	12.1	8.8	18.9
1963	-0.2	5.9	13.4	16.9	22.4	24.4	30.1	30.4	26.4	21.3	14.5	8.4	17.8
1964	6.5	3.8	12.3	18.3	25.8	27.9	32.8	34.0	26.0	20.3	14.2	8.1	19.2
1965	4.0	5.8	11.7	17.8	25.0	28.9	28.7	31.5	27.5	22.5	14.1	6.1	18.6
1966	4.6	8.7	11.4	18.1	24.5	26.9	29.8	33.2	24.9	20.8	14.1	5.0	18.5
1967	3.4	5.3	13.1	18.1	26.7	28.4	30.6	34.5	26.4	21.6	12.6	3.1	18.7
1968	4.2	4.3	12.9	20.1	23.5	29.5	30.5	29.7	26.1	19.3	13.9	10.0	18.7
1969	3.8	3.9	10.6	18.2	23.8	28.4	29.1	31.1	25.5	20.5	12.4	5.3	17.7
1970	3.8	8.0	8.7	18.3	23.8	25.4	28.9	30.6	25.8	21.3	12.6	6.4	17.8
1971	4.5	5.6	9.9	19.4	24.9	27.2	30.9	29.6	25.8	20.5	15.8	7.1	18.4
1972	7.1	6.1	11.9	18.1	22.5	28.5	30.3	29.8	25.3	21.0	12.3	7.2	18.3
1973	6.1	7.9	13.1	20.6	24.0	27.8	34.0	33.6	26.5	19.6	12.7	5.3	19.3
1974	5.3	5.0	11.3	19.6	24.7	28.1	26.1	31.9	27.2	20.8	13.3	6.1	18.2
1975	4.1	6.1	12.4	19.1	23.2	27.4	30.8	32.2	27.9	20.9	14.9	6.6	18.8
1976	4.5	9.3	12.1	18.0	24.0	27.1	28.6	30.6	25.7	21.2	11.2	7.0	18.3
Ave.	4.1	6.4	12.0	18.7	24.3	27.5	30.1	31.3	26.1	20.9	13.7	6.8	18.5

Table B 3 Continued (4)

Busan (1952-1976)													Unit: °C
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	6.1	6.3	11.4	17.3	21.7	23.9	27.4	29.2	24.9	21.1	17.2	7.3	17.8
1953	5.2	7.6	12.9	17.3	20.3	22.4	27.1	29.3	26.0	23.1	15.2	10.9	18.1
1954	8.2	9.6	12.6	16.9	20.5	21.4	24.2	29.3	26.2	20.0	18.4	9.2	18.0
1955	5.2	10.3	12.3	17.0	21.0	24.5	27.4	28.8	25.8	20.7	15.2	11.0	18.3
1956	7.1	7.3	10.6	16.1	20.8	22.5	26.7	27.3	24.6	21.2	13.5	6.0	17.0
1957	8.1	6.3	10.6	17.1	21.6	22.9	24.9	27.2	25.2	21.7	17.3	9.7	17.7
1958	5.4	9.7	12.5	17.2	21.7	25.0	27.6	27.1	25.6	20.0	15.3	13.2	18.4
1959	5.5	10.5	13.8	16.7	21.6	23.6	27.6	29.0	25.8	23.3	16.6	9.4	18.6
1960	6.5	11.0	14.0	17.1	20.8	24.0	28.2	30.9	25.6	21.6	16.5	7.6	18.7
1961	5.4	8.7	13.2	17.4	21.3	23.6	28.4	29.6	27.0	22.4	16.5	9.2	18.6
1962	5.6	9.4	12.4	16.7	22.8	23.3	26.7	28.2	25.2	20.9	14.1	11.3	18.1
1963	2.8	7.1	12.1	15.0	18.9	21.4	26.7	28.8	25.1	20.6	16.2	11.1	17.2
1964	8.8	5.7	12.6	16.3	22.4	23.8	28.0	30.9	25.5	21.4	16.1	10.1	18.5
1965	6.6	7.9	12.1	15.9	21.4	24.0	25.5	29.1	26.4	22.1	16.5	8.6	18.0
1966	6.4	10.2	12.5	16.5	21.3	23.3	26.5	30.7	25.2	21.7	15.5	7.6	18.1
1967	5.9	6.6	12.8	16.3	22.7	24.9	27.6	31.2	26.2	21.8	15.0	5.6	18.1
1968	6.1	5.6	12.6	17.6	19.9	23.9	26.8	27.8	24.9	20.2	16.5	12.0	17.8
1969	6.3	6.6	11.3	16.3	21.0	23.4	26.0	28.7	25.3	21.0	14.3	8.2	17.4
1970	5.9	9.8	9.6	15.9	20.8	21.9	25.7	29.0	25.6	21.3	14.5	8.7	17.4
1971	6.4	7.5	10.7	17.2	21.2	23.5	27.6	28.4	25.2	20.6	16.8	9.8	17.9
1972	9.7	8.3	12.2	16.3	19.8	23.6	26.8	27.5	24.6	21.0	14.4	10.2	17.9
1973	8.5	9.4	12.9	18.1	20.8	23.6	29.4	30.5	25.6	20.7	14.7	7.7	18.5
1974	7.5	7.3	11.5	17.3	21.2	23.2	23.8	28.6	26.6	21.3	15.2	8.9	17.7
1975	6.4	7.6	13.3	17.0	20.3	23.5	27.5	30.2	27.0	21.7	16.0	8.9	18.3
1976	6.6	10.9	12.4	16.6	20.5	22.9	25.5	28.2	24.6	21.5	13.1	9.7	17.7
Ave.	6.5	8.3	12.2	16.8	21.1	23.4	26.8	29.0	25.6	21.3	15.6	9.3	18.0

Table B 3 Continued (5)

Unit: °C

Gwangju (1952-1976)													
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	4.2	4.1	10.7	18.8	24.8	27.4	30.8	31.1	25.5	20.6	15.7	5.9	18.3
1953	3.2	5.7	12.5	17.9	23.6	25.3	30.3	31.7	27.4	23.0	13.1	8.3	18.5
1954	5.6	8.7	11.4	20.1	23.6	25.0	27.4	31.8	26.5	19.8	17.9	6.0	18.7
1955	2.7	8.7	11.9	18.9	24.8	28.6	30.2	31.3	27.4	20.1	13.3	9.5	18.9
1956	5.0	5.1	10.6	17.4	22.2	26.3	30.3	29.9	25.9	20.7	11.7	4.9	17.5
1957	5.2	4.3	9.2	18.3	24.1	25.8	27.6	29.6	26.0	20.5	16.2	8.3	17.9
1958	3.1	7.4	12.4	18.3	24.1	29.5	30.8	28.9	26.6	19.9	13.7	11.0	18.8
1959	2.3	9.6	14.1	17.3	24.5	27.5	30.5	32.7	26.4	23.6	11.4	8.1	19.2
1960	4.1	8.5	14.0	17.3	22.0	27.0	30.3	31.6	26.0	21.5	14.5	5.5	18.5
1961	2.6	6.5	12.9	18.9	22.9	26.9	30.8	31.1	27.2	22.4	15.1	7.2	18.7
1962	2.8	6.9	10.9	16.5	25.1	26.8	29.3	29.9	25.4	20.5	13.0	8.9	18.0
1963	-0.5	3.3	12.8	16.7	22.2	25.0	28.3	31.1	25.9	20.7	13.8	8.2	17.3
1964	6.4	3.3	11.7	20.2	24.5	26.4	30.6	32.3	26.7	20.7	14.0	8.0	18.7
1965	3.8	5.6	10.2	17.5	23.6	27.6	27.4	30.3	26.6	21.7	14.6	6.2	17.9
1966	4.2	8.5	11.7	18.1	23.8	26.5	28.8	32.4	26.2	21.3	14.4	5.0	18.4
1967	3.1	4.4	11.9	18.0	26.5	28.6	29.7	33.7	28.2	22.3	13.1	2.8	18.5
1968	3.3	2.7	11.7	19.3	23.2	28.2	30.8	30.4	27.0	19.5	15.2	10.5	18.5
1969	3.5	5.0	10.9	17.8	23.2	26.1	28.2	30.1	26.0	20.8	12.2	5.6	17.5
1970	3.4	7.8	8.3	18.4	23.7	24.7	28.2	31.8	26.2	21.5	12.7	6.9	17.8
1971	4.2	5.7	9.7	19.0	23.6	26.0	29.7	29.8	26.0	19.8	15.3	7.3	18.0
1972	8.3	5.3	12.1	17.9	21.9	27.6	29.3	28.9	25.3	21.2	13.1	7.5	18.2
1973	7.1	7.6	12.1	20.0	22.8	27.6	32.1	31.6	25.8	19.9	12.6	5.3	18.1
1974	5.7	5.9	10.4	18.3	23.9	26.4	26.9	31.0	26.4	20.0	13.1	6.7	17.9
1975	4.3	6.1	11.8	17.7	22.6	26.5	29.6	31.9	28.3	21.5	15.6	6.5	18.6
1976	3.4	10.1	11.8	17.9	22.3	26.0	28.3	29.9	26.0	20.8	11.7	7.6	18.0
Ave.	5.3	5.5	11.5	18.3	23.6	26.8	29.4	31.0	26.4	21.0	14.0	7.1	18.3

Table B 3 Continued (6)

<u>Jeonju (1952-1976)</u>												Unit: °C	
<u>Year</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Annual</u>
1952	3.5	3.1	9.7	18.3	24.7	28.2	31.4	30.3	25.1	19.8	14.3	4.4	17.7
1953	1.8	4.1	11.7	17.2	23.8	24.9	30.0	31.1	26.9	22.8	12.3	7.2	17.8
1954	4.1	7.9	10.6	18.8	23.3	25.5	27.6	31.5	26.3	19.3	17.3	4.7	18.1
1955	1.9	7.8	11.5	18.6	24.1	28.5	30.4	31.2	27.1	19.8	12.6	8.1	18.5
1956	3.5	4.3	10.3	16.9	21.8	26.5	30.2	30.3	26.0	20.5	11.2	3.7	17.1
1957	4.0	3.5	8.2	18.3	23.8	25.5	27.9	29.5	25.9	20.3	15.3	7.3	17.5
1958	2.4	6.1	11.9	18.2	23.6	29.6	30.6	28.7	25.8	19.6	12.8	10.0	18.3
1959	1.8	8.6	13.1	16.8	24.3	27.7	30.5	32.5	26.3	22.7	12.7	7.0	18.7
1960	4.0	8.4	14.2	18.2	22.9	27.5	31.4	32.6	26.4	21.8	14.2	5.3	18.9
1961	2.8	5.9	12.3	18.8	23.8	27.7	31.7	31.8	27.6	22.2	14.9	7.0	18.9
1962	2.8	6.9	11.1	17.1	25.6	27.6	31.2	30.4	25.5	20.3	12.7	8.4	18.3
1963	-0.9	3.6	12.8	17.2	23.1	26.2	29.5	30.6	26.4	20.6	13.6	7.8	17.5
1964	5.8	2.9	11.2	21.1	24.4	27.1	31.1	32.7	26.3	20.5	13.0	7.2	18.6
1965	2.9	5.1	9.8	17.6	24.6	28.5	28.6	31.0	27.3	21.8	14.1	6.1	18.1
1966	3.9	8.4	11.5	18.4	24.6	27.1	29.5	32.2	26.1	21.2	13.9	3.9	18.4
1967	2.7	3.8	11.7	18.7	27.0	28.4	30.5	32.9	27.1	21.5	12.5	2.4	18.3
1968	2.9	2.5	11.5	19.5	23.7	28.2	30.5	30.3	26.7	19.4	14.5	10.2	18.3
1969	2.5	4.3	10.0	18.5	23.3	26.8	29.0	30.7	26.3	20.8	11.9	5.8	17.5
1970	3.4	7.8	8.0	19.0	24.9	25.9	29.1	31.5	26.6	21.5	12.5	6.3	18.0
1971	3.9	5.6	9.8	19.1	24.7	27.2	30.1	30.3	26.8	20.0	15.3	6.5	18.3
1972	7.6	5.0	11.9	18.4	22.2	28.0	30.1	29.2	25.2	21.3	12.5	7.0	18.2
1973	6.0	6.9	12.2	20.1	23.2	27.5	32.8	32.4	26.2	19.6	12.1	4.6	18.6
1974	4.6	5.0	10.5	18.4	23.5	26.3	27.4	31.4	26.4	19.6	12.4	5.7	17.6
1975	4.1	5.9	11.3	19.4	22.8	26.8	30.0	32.4	28.5	21.4	15.6	5.9	18.7
1976	3.7	9.4	11.6	18.5	23.3	26.8	28.5	30.5	26.1	20.9	11.2	7.2	18.1
Ave.	3.4	5.7	11.1	18.4	23.9	27.2	30.0	31.1	26.4	20.8	13.4	6.4	18.2

Table B 4 MONTHLY MEAN MINIMUM TEMPERATURE

Seoul (1954-1976) Unit: °C

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	--	--	--	--	--	--	--	--	--	--	--	--	--
1953	--	--	--	--	--	--	--	--	--	--	--	--	--
1954	-5.5	-4.3	-1.6	6.7	11.7	15.7	18.9	22.7	16.5	7.2	4.5	-6.9	7.1
1955	-10.6	-5.1	-0.2	6.5	11.1	17.2	21.8	22.0	16.3	7.6	1.2	-3.3	7.0
1956	-8.5	-7.9	-0.3	5.3	10.5	16.0	21.5	21.7	16.1	7.2	-1.7	-9.6	5.9
1957	-7.6	-8.5	-3.8	5.4	11.8	16.0	19.9	20.8	13.4	7.2	3.3	-4.2	6.1
1958	-10.7	-4.7	-1.0	6.2	11.2	17.6	22.5	20.5	15.8	8.0	2.5	0.0	7.3
1959	-9.5	-1.3	1.8	5.6	13.1	16.6	21.2	22.2	16.9	9.6	1.0	-2.8	7.9
1960	-7.6	-2.7	1.9	5.5	11.9	16.7	21.9	22.5	16.9	9.9	2.3	-6.2	7.8
1961	-9.6	-5.3	0.7	6.5	11.8	17.6	23.3	23.5	17.1	10.8	4.7	-4.5	8.1
1962	-7.3	-4.8	-1.0	4.9	11.5	16.3	22.2	22.4	16.3	8.0	2.2	-3.0	7.3
1963	-13.0	-6.5	0.6	7.3	12.7	17.2	21.8	22.5	16.2	8.0	2.2	-3.1	7.2
1964	-3.5	-7.0	0.1	10.1	13.7	17.6	22.0	23.3	16.6	9.3	2.1	-3.7	8.4
1965	-7.9	-5.2	-1.7	5.5	12.4	17.2	20.8	21.4	15.9	9.7	2.7	-6.2	7.0
1966	-9.0	-4.4	1.3	7.0	12.9	16.4	21.2	23.3	15.5	10.2	1.4	-6.7	7.4
1967	-8.5	-5.8	0.8	7.3	14.2	17.5	22.5	24.1	16.3	9.2	2.6	-8.3	7.7
1968	-7.7	-8.4	0.3	7.1	12.5	16.4	21.9	21.3	16.3	8.4	3.5	0.1	7.6
1969	-6.7	-6.1	-0.8	6.2	12.0	15.6	21.1	21.7	17.3	8.7	1.2	-6.0	7.8
1970	-8.8	-3.7	-3.2	7.1	13.8	16.9	20.5	22.9	17.5	10.2	1.4	-4.6	7.5
1971	-5.7	-4.2	-1.5	6.5	12.0	18.2	21.3	21.5	16.8	8.0	4.8	-4.7	7.8
1972	-2.1	-3.5	1.4	6.9	11.7	17.2	22.1	19.7	14.8	9.1	1.6	-2.9	8.0
1973	-2.6	-3.2	0.4	8.0	12.8	17.8	23.6	23.0	16.5	8.6	0.8	-7.0	8.2
1974	-6.3	-5.5	-0.1	6.2	12.1	15.5	20.9	21.8	16.5	7.8	1.3	-4.1	7.2
1975	-6.3	-4.6	0.5	8.4	12.3	17.5	22.0	23.4	19.0	11.2	5.2	-5.0	8.6
1976	-7.8	-0.7	1.0	6.7	11.5	17.2	19.7	20.9	15.4	9.2	-0.4	-3.4	7.2
Ave.	-7.5	-4.9	-0.2	6.6	12.2	16.9	21.5	22.1	16.3	8.8	2.2	-4.6	7.5

Table B 4 Continued (2)

Chupungryeong (1953-1976)													Unit: °C
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	-	-	-	-	-	-	-	-	-	-	-	-	-
1953	-8.2	-6.6	-0.1	2.8	10.5	15.6	20.8	20.5	14.4	8.2	0.1	-2.5	6.3
1954	-4.7	-4.2	-2.0	5.5	10.1	13.9	18.3	21.1	15.5	6.6	4.0	-5.2	6.6
1955	-8.5	-4.6	0.2	5.9	10.6	16.8	21.4	20.1	15.1	6.6	13.	-2.9	6.8
1956	-7.1	-6.6	0.1	4.7	10.2	15.2	20.9	19.6	14.9	6.8	-1.4	-7.6	5.8
1957	-5.1	-7.0	-3.3	5.3	11.5	15.2	19.5	19.7	11.7	6.8	2.3	-3.3	6.1
1958	-8.8	-4.7	-1.0	6.1	10.1	15.9	21.1	19.3	14.9	7.0	2.6	-0.1	6.9
1959	-7.5	-1.1	1.5	5.5	12.6	16.1	21.1	21.4	16.4	8.1	1.8	-2.2	7.8
1960	-6.5	-3.0	1.9	5.4	11.5	16.2	22.2	21.5	15.8	8.6	2.1	-4.8	7.6
1961	-8.3	-4.8	0.6	6.4	11.8	16.9	23.2	22.7	17.1	10.5	4.0	-3.8	8.0
1962	-5.8	-3.9	-1.1	4.7	11.4	15.9	21.2	21.4	15.5	7.1	2.2	-2.2	7.2
1963	-10.4	-6.3	-0.4	6.5	12.1	15.7	21.2	21.2	14.7	5.9	1.5	-2.3	6.6
1964	-3.8	-5.9	-0.4	8.9	12.7	16.1	21.9	22.1	16.7	8.4	1.8	-3.7	7.9
1965	-7.7	-4.7	-1.7	5.0	11.7	15.8	20.3	21.1	14.2	8.6	2.7	-5.5	6.6
1966	-7.3	-4.5	1.0	6.0	11.1	15.3	20.4	22.4	14.7	9.3	0.8	-5.5	7.0
1967	-7.7	5.1	0.2	6.3	12.7	16.6	21.4	23.1	14.3	7.8	2.3	-7.1	7.1
1968	-6.2	-8.4	-0.7	5.8	11.3	15.8	20.9	19.9	14.2	7.0	2.0	-1.1	6.7
1969	-6.6	-5.9	-1.8	5.3	11.2	14.5	19.9	20.6	15.8	6.7	0.4	-5.9	6.2
1970	-8.7	-4.3	-3.4	4.9	12.1	15.6	19.8	22.1	17.0	8.6	0.3	-4.4	6.6
1971	-6.0	-4.9	-1.6	5.2	10.6	16.7	21.1	20.3	14.9	6.1	2.2	-4.8	6.7
1972	-3.0	-3.3	0.3	5.6	10.0	15.7	20.5	19.0	13.5	7.5	1.8	-3.9	7.0
1973	-3.2	-3.2	0.6	6.7	11.2	16.2	21.9	21.9	14.5	7.5	0.1	-6.2	7.2
1974	-7.4	-6.0	-1.2	5.3	11.2	14.5	19.2	20.4	13.3	7.1	0.2	-4.6	6.0
1975	-5.6	-4.8	-0.6	0.9	10.7	16.2	20.7	20.9	17.3	9.4	3.7	-4.5	7.5
1976	-7.7	-2.0	-0.2	4.8	9.6	15.4	18.5	20.0	13.2	7.2	-0.9	-3.8	6.2
Ave.	-6.7	-4.4	-0.5	5.6	11.2	15.7	20.7	20.9	15.0	7.6	1.6	-4.1	6.9

Table B 4 Continued (3)

Daegu (1952-1976)													Unit: °C
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	-4.9	-5.0	0.2	6.8	11.9	17.1	21.6	21.4	16.3	7.8	4.3	-4.8	7.7
1953	-7.9	-4.5	1.1	4.7	11.9	17.1	22.4	22.7	16.3	10.2	1.6	-1.0	7.9
1954	-2.6	-2.3	0.4	7.7	11.7	15.4	19.8	23.1	17.7	7.9	4.9	-2.7	8.4
1955	-7.8	-3.4	2.5	7.2	12.4	18.0	22.9	21.0	16.5	8.0	1.6	-2.1	8.1
1956	-5.9	-5.5	1.3	6.1	11.3	16.3	21.3	20.6	16.4	7.9	-0.6	-6.7	6.9
1957	-3.9	-5.4	-2.1	6.4	11.9	15.8	20.5	20.4	12.5	7.5	2.9	-2.7	7.0
1958	-7.8	-3.7	-0.3	7.2	11.6	17.3	22.1	20.7	16.5	8.6	4.5	0.7	8.1
1959	-6.0	0.5	3.1	6.8	13.0	17.2	22.5	22.6	18.2	9.6	3.5	-1.5	9.1
1960	-5.5	-2.1	2.8	6.5	12.5	17.3	23.1	22.8	17.1	9.7	3.2	-3.5	8.7
1961	-7.4	-3.9	2.3	7.4	12.5	17.6	24.1	23.5	18.2	12.3	4.9	-2.6	9.1
1962	-4.9	-3.3	-0.2	6.1	12.1	16.3	22.1	22.2	16.5	8.6	3.5	-1.5	8.1
1963	-9.0	-5.9	0.8	7.3	12.4	16.1	22.3	22.4	15.8	7.7	2.4	-1.8	7.5
1964	-2.7	-3.9	0.8	8.6	13.3	17.0	23.0	24.0	17.9	9.6	2.2	-3.3	8.9
1965	-7.1	-3.9	-0.8	5.6	12.6	16.7	21.4	22.3	15.1	9.4	4.1	-4.3	7.6
1966	-5.9	-2.6	2.5	7.1	12.0	16.8	21.5	24.1	15.7	10.5	1.8	-4.3	8.3
1967	-7.0	-3.6	1.6	7.6	13.7	17.9	22.6	24.4	16.3	9.3	3.1	5.7	8.4
1968	-5.3	-6.9	0.9	6.9	12.5	17.0	22.2	21.6	16.5	8.6	3.5	0.7	8.2
1969	-4.7	-3.9	-0.2	6.2	12.7	16.7	21.4	22.3	17.2	8.1	1.7	-4.6	7.7
1970	-7.5	-2.8	-1.8	6.6	13.1	17.0	21.2	23.3	19.1	10.6	1.4	-3.2	8.1
1971	-4.8	-3.3	0.2	6.9	12.4	17.8	23.0	21.7	16.7	8.0	3.3	-4.0	8.2
1972	-1.7	-5.6	1.7	6.7	10.9	17.2	22.0	20.6	15.4	9.2	3.2	-2.9	8.4
1973	-1.6	-1.3	1.1	8.4	12.9	17.3	23.8	23.8	16.5	8.8	1.9	-5.7	8.8
1974	-6.4	-4.0	0.8	7.1	12.7	16.0	19.7	22.1	15.3	9.2	1.5	-2.4	7.6
1975	-3.9	-3.1	1.2	8.1	12.5	17.4	22.3	22.5	19.4	11.3	5.6	-2.7	9.2
1976	-6.4	-0.8	1.6	7.1	11.7	17.3	20.1	21.9	15.0	9.5	0.8	-3.0	7.9
Ave.	-5.5	-3.6	1.1	6.9	12.3	16.9	22.0	22.3	16.6	9.1	2.8	-2.5	8.2

Table B 4 Continued (4)

Busan (1952-1976)													Unit: °C
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	-1.5	-1.6	3.1	9.6	13.6	17.8	21.6	22.8	18.4	12.5	9.5	-0.1	10.5
1953	-2.5	-0.3	4.2	8.8	13.7	17.0	21.4	23.5	19.0	15.2	6.1	3.3	10.8
1954	1.2	1.4	3.6	9.9	13.5	15.9	19.7	23.5	19.7	12.3	10.1	0.6	11.0
1955	-3.6	1.8	5.4	10.0	14.0	18.4	22.3	22.1	19.1	12.4	6.1	2.9	10.9
1956	-1.2	-1.7	3.4	8.6	13.0	16.5	21.0	21.4	18.5	13.1	4.5	-2.3	9.6
1957	0.3	-2.2	1.2	9.1	14.1	16.5	20.6	21.6	17.6	12.7	8.7	2.1	10.2
1958	-2.7	1.3	3.9	9.6	13.5	17.7	21.7	21.6	18.9	12.2	8.3	4.8	10.9
1959	-2.9	3.5	5.7	9.1	14.2	17.4	21.7	23.3	19.9	14.5	7.6	2.1	11.3
1960	-1.8	2.1	5.6	8.9	14.0	17.6	22.3	23.9	19.0	14.0	8.2	-0.1	11.1
1961	-2.7	-0.5	5.1	9.6	14.1	17.5	23.4	23.8	20.3	15.6	8.9	1.2	11.4
1962	-2.1	0.9	3.0	8.4	14.1	16.6	21.1	22.3	18.3	12.9	6.8	2.8	10.4
1963	-6.2	-1.9	3.9	8.7	12.8	15.9	21.7	23.4	18.5	12.7	7.8	2.4	10.0
1964	2.2	-1.2	4.3	9.5	14.9	17.5	22.1	24.8	19.5	14.0	7.2	1.9	11.4
1965	-1.5	-0.1	2.1	7.8	13.8	17.3	20.9	22.8	17.7	13.7	8.3	0.2	10.3
1966	-1.9	1.3	5.0	9.2	14.1	17.3	21.6	24.8	18.5	14.2	6.5	-0.3	10.9
1967	-2.5	-0.7	4.9	9.5	15.1	18.2	22.2	24.9	19.1	13.9	7.6	-2.2	10.8
1968	-2.1	-3.5	3.7	9.8	13.3	16.8	21.5	22.4	18.8	12.8	8.3	5.0	10.6
1969	-0.5	-0.3	2.5	8.5	14.1	17.4	21.3	23.4	19.4	13.0	6.1	-0.4	10.4
1970	-2.6	1.5	0.9	8.9	14.6	17.1	21.2	23.8	20.4	14.2	6.2	1.0	10.6
1971	-0.9	0.0	3.0	9.3	14.3	18.1	22.7	22.3	18.7	12.9	8.9	1.3	10.9
1972	3.1	1.5	5.2	9.6	13.3	17.5	21.7	21.7	17.8	13.4	6.7	2.0	11.1
1973	2.0	1.9	4.2	10.7	14.3	17.4	23.5	24.4	18.6	12.9	5.8	-1.7	11.2
1974	-0.5	-0.5	3.3	9.1	14.0	16.9	19.6	22.6	18.8	13.1	6.6	1.6	10.4
1975	-0.7	-0.2	4.3	10.0	13.7	17.8	22.3	24.0	21.7	15.1	9.5	1.3	11.6
1976	-2.6	2.8	4.1	9.1	13.1	17.4	20.3	22.6	17.6	13.1	4.4	1.6	10.3
Ave.	-1.4	0.6	3.8	9.3	13.9	17.3	21.6	23.1	19.0	13.5	7.4	1.2	10.8

Table B 4 Continued (5)

Gwangju (1952-1976)													Unit: °C
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	-3.5	-3.8	0.1	6.5	12.8	17.2	23.0	22.4	16.9	7.8	5.4	-2.8	8.5
1953	-4.8	-3.2	0.9	4.1	12.2	18.0	23.6	23.8	16.8	10.3	2.3	0.2	8.7
1954	-1.8	-1.0	-0.5	7.5	12.1	16.6	20.5	24.1	17.4	8.1	4.4	-1.8	8.8
1955	-6.2	-2.5	1.8	7.3	11.0	18.2	23.0	23.1	17.6	8.0	2.1	-1.3	8.5
1956	-4.3	-4.5	2.3	6.0	10.8	17.6	23.2	21.7	17.1	8.3	0.7	-4.1	7.9
1957	-2.8	-3.9	-2.1	6.0	12.7	16.6	22.2	21.4	13.3	7.7	3.5	-0.8	7.8
1958	-5.7	-2.5	0.4	7.5	11.5	17.6	23.3	21.5	17.2	9.3	3.5	0.5	8.7
1959	-6.2	1.7	3.3	5.9	12.5	17.2	23.0	23.7	18.7	9.5	3.5	0.1	9.4
1960	-3.3	-1.6	3.5	5.7	12.4	17.6	22.1	22.7	17.4	10.4	4.7	-1.6	9.2
1961	-5.2	-3.1	2.1	6.7	12.7	18.6	24.4	24.2	18.8	12.1	5.6	-0.9	9.7
1962	-3.4	-1.8	-0.2	5.4	11.4	16.8	22.5	22.5	17.5	8.9	4.7	-0.5	8.7
1963	-8.0	-5.6	0.9	9.1	13.9	18.0	22.7	22.4	16.2	8.6	4.1	-0.3	8.5
1964	-1.6	-3.2	1.1	12.2	13.4	17.7	23.6	23.4	18.4	10.5	3.4	-1.2	9.8
1965	-4.6	-2.8	-1.1	5.7	12.7	16.5	22.2	22.9	15.3	9.5	5.1	-2.3	8.3
1966	-4.5	-2.5	2.9	7.6	12.6	17.1	22.4	24.2	17.3	11.4	3.4	-2.9	9.1
1967	-5.0	-3.3	1.2	8.0	14.0	18.0	22.8	24.6	17.2	9.8	4.1	-4.5	8.9
1968	-3.6	-5.6	0.8	7.1	12.8	12.6	22.0	22.0	16.6	9.6	4.7	2.0	8.7
1969	-3.2	-1.8	-0.3	7.6	12.1	15.3	21.5	22.5	18.6	8.3	3.3	-2.8	8.4
1970	-5.6	-1.8	-1.9	6.9	13.0	17.2	21.2	23.9	19.2	11.5	2.6	-1.8	8.7
1971	-4.0	-2.3	0.1	6.5	12.1	17.9	23.0	22.4	17.1	8.1	4.3	-1.9	8.6
1972	0.1	-1.4	1.8	7.5	11.8	17.3	22.1	21.1	16.3	9.4	4.3	-1.5	9.1
1973	-1.1	-1.1	0.7	8.0	12.5	17.4	23.1	23.4	16.3	9.5	2.1	-4.1	8.9
1974	-4.6	-3.5	0.2	6.7	11.9	14.6	21.1	22.1	15.8	9.3	2.6	-1.0	7.9
1975	-3.1	-2.7	0.3	8.3	12.3	17.3	22.9	23.4	20.2	12.0	5.8	-2.3	9.5
1976	-5.1	0.3	1.6	6.9	11.3	17.3	20.0	22.7	15.4	10.1	1.7	-1.7	8.4
Ave.	-4.0	-2.5	0.8	7.1	12.3	17.0	22.5	22.9	17.1	9.5	3.7	-1.6	8.7

Table B 4 Continued (6)

Jeonju (1952-1976)													Unit: °C
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	-3.9	-5.1	-0.3	6.7	12.6	16.8	22.7	21.5	16.4	7.5	5.0	-3.1	8.1
1953	-6.3	-4.7	0.8	4.4	12.6	17.5	23.3	23.1	16.2	10.4	1.8	-0.7	8.2
1954	-2.8	-1.8	-0.9	6.7	11.8	16.3	20.2	23.3	16.9	8.0	4.9	-3.4	8.3
1955	-7.4	-2.8	1.2	7.7	11.0	17.6	22.7	22.8	16.8	7.7	2.2	-1.7	8.2
1956	-6.1	-5.6	1.4	5.9	10.3	17.4	22.6	20.9	16.6	7.6	-0.1	-5.5	7.1
1957	-3.8	-5.0	-2.6	5.5	11.7	15.9	21.5	21.1	12.7	7.6	3.7	-2.0	7.2
1958	-6.8	-3.1	-0.2	6.9	10.7	16.8	23.1	21.2	16.1	8.7	3.0	0.5	8.1
1959	-6.4	1.0	2.8	6.0	12.4	16.7	22.4	22.9	17.8	9.1	1.6	-1.2	8.8
1960	-4.8	-2.1	2.7	5.4	11.7	17.4	23.4	22.8	17.2	9.6	3.2	-2.7	8.7
1961	-6.1	-4.2	1.3	6.6	12.4	18.2	24.3	24.5	18.5	11.3	5.0	-2.1	9.1
1962	-4.8	-2.6	-0.3	5.0	11.3	16.9	22.7	22.9	17.1	8.1	3.8	-1.4	8.2
1963	-9.0	-5.7	0.7	8.6	13.7	17.7	23.0	22.4	16.4	7.9	3.2	-0.9	8.2
1964	-2.5	-4.3	0.5	12.0	13.1	17.8	23.9	23.8	18.0	9.8	2.6	-2.1	9.4
1965	-5.7	-3.7	-1.5	5.4	13.1	16.8	22.4	23.0	15.4	9.9	4.6	2.8	8.1
1966	-5.7	-2.8	2.8	7.4	12.7	17.3	22.4	23.8	16.8	11.3	3.0	-3.7	8.8
1967	-6.0	-4.0	1.1	7.7	13.5	18.3	23.1	24.9	17.2	9.0	3.3	-4.8	8.6
1968	-4.3	-6.4	0.4	6.9	12.9	16.7	22.6	22.0	16.5	9.0	4.5	2.0	8.6
1969	-4.2	-2.8	-0.8	7.5	12.2	15.3	21.6	23.1	18.2	7.8	2.3	-3.6	8.1
1970	-7.2	-3.3	-2.7	6.6	12.7	16.8	21.1	22.8	17.8	9.2	1.0	-3.1	7.6
1971	-5.0	-3.3	-0.9	5.9	11.9	17.5	22.9	21.6	15.9	6.1	2.5	-4.1	7.6
1972	-2.1	-2.2	1.2	7.9	11.5	17.0	22.1	20.8	15.9	9.1	3.6	-2.1	8.6
1973	-2.1	-2.0	-0.4	7.8	12.0	17.6	23.5	23.6	16.4	8.8	1.4	-5.4	8.4
1974	-6.0	-4.5	-0.2	7.0	12.1	15.2	21.3	21.9	15.8	8.7	2.2	-2.2	7.6
1975	-4.2	-4.0	0.3	8.2	12.2	17.4	22.7	23.7	19.6	11.5	5.2	-3.8	9.1
1976	-6.8	-0.2	1.0	6.7	11.2	17.1	20.3	22.8	15.0	9.3	0.5	-2.7	7.9
Ave.	-5.2	-3.5	0.3	6.9	12.1	17.0	22.5	22.7	16.7	8.9	3.0	2.3	8.8

Table B 5 MONTHLY MEAN RELATIVE HUMIDITY

Seoul (1954-1976)

Unit: %

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	—	—	—	—	—	—	—	—	—	—	—	—	—
1953	—	—	—	—	—	—	—	—	—	—	—	—	—
1954	72	74	65	60	67	75	86	87	79	70	74	64	73
1955	67	63	64	67	69	74	87	71	71	70	71	67	70
1956	64	60	74	68	69	80	86	73	75	66	57	58	69
1957	71	67	65	68	66	72	87	82	65	70	68	70	71
1958	70	71	62	64	60	63	81	78	76	69	71	72	70
1959	62	69	68	67	63	74	83	75	75	67	69	67	70
1960	63	64	65	59	64	74	83	73	74	66	65	62	68
1961	65	62	64	63	69	79	86	82	76	67	66	67	71
1962	59	65	64	67	58	71	74	83	78	69	68	73	61
1963	66	71	64	71	72	77	85	78	66	67	64	67	71
1964	67	66	65	74	66	73	84	79	79	65	65	64	71
1965	66	59	59	57	65	67	82	84	69	69	69	64	68
1966	57	67	69	61	58	77	87	80	73	71	63	61	69
1967	62	65	67	67	64	74	80	83	69	64	65	65	69
1968	65	63	65	53	67	71	81	75	71	71	76	72	69
1969	68	69	62	69	67	71	79	83	78	65	68	66	70
1970	65	64	59	52	63	74	86	81	80	74	72	67	70
1971	72	64	65	57	70	82	88	80	73	66	72	65	71
1972	75	69	74	66	65	72	78	83	78	77	76	68	73
1973	74	64	61	71	64	76	85	89	76	67	67	65	72
1974	64	65	69	66	68	73	82	80	74	72	64	64	70
1975	62	56	70	63	66	75	83	73	74	67	62	58	67
1976	57	65	60	56	57	67	74	82	70	68	67	68	66
Ave.	66	65	65	64	65	74	83	79	74	69	68	66	70

Table B 5 Continued (2)

Chupungryeong (1953-1976) Unit: %

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	—	—	—	—	—	—	—	—	—	—	—	—	—
1953	53	57	59	48	64	79	82	80	72	69	61	64	66
1954	62	64	54	62	67	77	82	79	79	74	70	60	69
1955	63	63	68	66	67	71	82	79	80	75	71	65	71
1956	66	65	76	65	67	80	83	79	82	70	64	65	72
1957	67	66	62	63	61	73	85	82	69	66	70	71	70
1958	67	67	57	60	58	60	79	81	78	72	71	72	69
1959	63	74	67	66	60	70	80	79	81	67	66	66	70
1960	64	58	60	56	18	71	81	73	80	74	67	63	64
1961	59	58	61	57	67	77	82	82	81	73	71	66	70
1962	62	61	56	60	49	66	76	79	81	69	70	67	66
1963	67	61	58	73	70	79	83	78	69	68	65	68	70
1964	68	66	62	79	66	72	79	77	80	71	68	63	71
1965	65	61	54	54	64	64	85	82	71	67	74	67	67
1966	59	66	69	65	62	73	82	85	81	77	65	63	71
1967	63	63	61	66	57	70	81	80	80	68	70	67	69
1968	63	64	57	52	67	69	80	82	76	77	78	73	70
1969	72	71	64	69	65	68	84	86	86	71	69	67	73
1970	62	61	54	57	66	79	86	85	86	75	68	66	70
1971	72	73	66	57	65	78	84	86	81	74	74	66	73
1972	77	74	74	69	71	72	82	84	81	74	77	73	76
1973	77	63	57	63	67	77	79	81	79	76	70	70	72
1974	66	66	65	63	66	70	88	80	74	72	67	70	71
1975	65	61	64	62	71	56	81	80	82	76	73	61	69
1976	61	70	63	62	62	72	79	84	76	70	68	73	70
Ave.	65	65	62	62	62	72	82	81	79	72	69	67	70

Table B 5 Continued (3)

Daegu (1952-1976)													Unit: %
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	56	58	63	63	68	61	72	72	69	68	74	63	66
1953	57	61	61	52	65	79	80	73	73	69	64	67	67
1954	69	65	55	67	72	77	81	75	77	75	71	54	70
1955	51	62	69	72	67	74	78	72	75	69	66	61	68
1956	56	50	67	64	65	77	81	75	81	69	59	56	67
1957	62	58	56	59	59	69	83	79	68	61	66	65	65
1958	58	63	53	61	58	61	76	80	77	71	69	71	67
1959	55	69	62	63	59	66	73	75	78	65	64	64	66
1960	61	57	62	58	67	63	75	68	78	71	66	59	65
1961	56	56	62	59	67	73	80	82	76	72	69	64	68
1962	58	57	53	60	53	68	77	74	78	70	67	63	65
1963	52	52	56	74	71	81	80	79	70	69	63	63	68
1964	67	65	62	79	67	69	73	69	79	70	64	59	69
1965	59	61	53	53	61	63	83	76	67	66	69	61	64
1966	52	62	69	69	65	75	81	80	78	75	63	59	69
1967	57	58	63	68	64	73	75	74	78	71	78	68	69
1968	65	64	63	59	68	66	77	81	78	78	77	71	71
1969	71	70	62	67	65	65	77	78	81	69	63	66	70
1970	57	57	50	64	67	76	81	81	81	72	63	62	68
1971	70	73	64	58	62	73	79	79	73	63	65	56	68
1972	70	63	66	65	64	63	77	78	76	70	72	65	69
1973	70	56	50	58	58	65	64	65	68	72	62	62	63
1974	63	62	61	57	61	62	80	70	67	67	64	65	65
1975	59	56	60	61	67	73	75	72	74	71	68	57	66
1976	54	67	58	61	58	66	68	71	69	64	60	65	63
Ave.	59	61	60	63	64	70	77	75	75	69	67	63	70

Table B 5 Continued (4)

Busan (1952-1976)													Unit: %
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	48	50	58	67	69	77	82	79	78	64	65	52	66
1953	45	52	57	55	74	88	89	80	73	62	53	55	65
1954	61	59	57	75	78	86	89	81	74	64	60	47	69
1955	44	54	67	72	76	80	88	78	75	61	61	52	67
1956	53	48	74	73	73	88	89	82	78	62	51	49	68
1957	58	53	54	66	73	86	92	85	73	66	65	63	70
1958	52	59	59	69	67	74	87	80	74	64	61	60	67
1959	49	66	62	66	70	77	86	81	77	61	59	53	67
1960	49	52	63	63	72	78	85	73	77	65	61	52	66
1961	47	48	63	66	72	77	86	85	75	69	63	54	67
1962	46	52	52	64	61	76	87	82	77	64	59	55	65
1963	45	46	65	76	83	86	87	81	70	64	56	53	68
1964	57	57	59	85	74	80	85	76	78	64	53	48	68
1965	47	51	46	59	71	77	91	83	67	66	66	54	65
1966	50	61	68	70	67	78	83	78	69	67	57	50	67
1967	48	53	63	71	71	77	83	79	72	59	62	51	66
1968	47	46	56	57	74	76	82	81	74	64	61	55	64
1969	58	58	53	67	64	74	86	83	79	60	52	50	65
1970	50	45	38	67	70	85	90	85	82	69	55	52	66
1971	54	60	55	62	69	80	86	81	73	61	59	51	66
1972	66	65	69	74	71	80	84	83	73	66	67	58	71
1973	63	56	56	67	72	80	82	80	76	69	55	49	67
1974	51	54	59	69	71	77	93	81	68	62	55	56	66
1975	54	54	60	69	75	82	86	77	79	68	63	53	68
1976	49	65	60	66	70	79	83	83	73	62	57	57	67
Ave.	52	55	59	68	71	80	86	81	75	64	59	53	70

Table B 5 Continued (5)

Unit: %

Gwangju (1952-1976)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	69	66	72	70	73	71	78	79	84	78	77	75	74
1953	65	69	69	64	72	82	82	77	76	73	71	73	73
1954	73	72	63	69	72	77	82	77	76	77	75	67	73
1955	69	72	72	72	69	74	80	78	74	72	74	69	73
1956	71	66	80	71	76	81	82	77	78	76	70	68	75
1957	72	68	64	74	71	78	91	82	70	73	74	75	74
1958	76	69	67	71	70	71	82	80	76	74	74	74	74
1959	76	77	69	72	71	72	80	73	81	69	70	72	74
1960	72	67	68	68	72	73	81	75	81	71	71	72	73
1961	71	67	71	70	75	77	81	82	80	74	78	72	75
1962	73	71	64	67	59	73	80	81	80	70	70	72	78
1963	81	73	68	79	78	82	83	79	75	75	75	72	77
1964	70	70	68	81	69	78	86	76	79	72	75	66	74
1965	74	68	62	62	68	69	89	81	71	73	72	72	72
1966	67	70	72	68	66	74	80	78	74	72	65	64	70
1967	67	65	64	69	65	69	81	78	72	64	72	75	70
1968	71	67	63	60	72	70	77	84	77	77	77	75	73
1969	77	71	66	74	73	74	82	81	82	71	70	76	75
1970	67	66	50	60	66	79	82	77	84	77	73	72	71
1971	76	73	65	63	71	80	84	81	77	71	74	69	73
1972	75	72	75	72	71	71	78	78	75	74	80	79	75
1973	78	73	66	69	74	74	79	81	80	75	73	80	75
1974	73	72	71	70	69	72	86	77	76	75	73	74	74
1975	77	72	71	72	75	80	84	79	82	78	76	74	77
1976	76	79	69	69	71	75	77	81	75	72	74	73	74
Ave.	73	70	68	69	71	75	82	79	77	73	73	72	74

Table B 5 Continued (6)

Jeonju (1952-1976)													Unit: %
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	70	72	75	71	69	66	75	80	86	78	78	75	75
1953	68	72	72	62	68	82	83	77	77	72	72	76	73
1954	75	73	66	70	73	76	82	82	82	75	73	71	75
1955	70	71	75	73	75	81	83	86	73	80	83	72	77
1956	73	69	80	74	79	82	82	80	80	80	68	68	76
1957	75	69	70	73	75	82	89	85	73	74	78	80	77
1958	75	75	68	74	75	71	84	84	81	75	79	77	76
1959	72	80	76	79	75	79	83	80	87	75	78	77	79
1960	72	73	71	72	74	79	82	78	84	77	81	75	77
1961	72	74	74	70	76	79	83	85	84	79	80	75	78
1962	75	74	70	72	64	74	79	84	88	76	74	77	76
1963	78	77	74	80	79	83	82	83	76	78	77	81	79
1964	78	78	74	80	79	81	80	76	80	74	77	74	78
1965	75	74	70	66	70	69	81	77	68	70	70	62	71
1966	61	62	70	74	71	76	81	83	81	78	72	72	73
1967	69	72	70	71	57	64	69	71	68	66	71	70	68
1968	69	69	67	58	67	68	74	79	74	76	75	72	71
1969	73	66	66	77	76	74	81	81	81	73	72	75	75
1970	75	75	68	69	72	80	84	82	85	79	76	76	77
1971	80	77	71	69	70	80	83	80	75	72	76	72	75
1972	78	76	79	73	74	75	80	82	79	75	80	77	77
1973	79	73	67	67	71	73	75	75	76	76	73	77	74
1974	73	70	71	66	68	70	82	73	74	75	73	73	72
1975	72	70	71	69	74	79	83	77	81	78	76	76	76
1976	74	78	71	65	67	74	78	80	75	72	73	76	74
Ave.	73	73	71	71	69	76	81	80	79	75	75	74	75

Table B 6 MONTHLY PRECIPITATION

Unit: mm

Seoul (1954-1976)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	--	--	--	--	--	--	--	--	--	--	--	--	--
1953	--	--	--	--	--	--	--	--	--	--	--	--	--
1954	14.0	111.3	4.9	54.3	66.7	229.9	587.5	209.1	53.2	45.1	16.8	43.3	1,436.1
1955	12.4	9.5	15.7	55.0	80.7	316.4	397.5	60.1	188.0	26.7	56.2	12.7	1,230.9
1956	6.3	26.6	139.3	65.9	72.4	417.2	524.1	47.2	345.9	29.7	16.1	10.3	1,701.0
1957	43.1	14.7	16.7	106.0	60.6	32.7	474.8	286.5	4.5	83.5	20.4	76.8	1,220.3
1958	54.7	7.7	25.6	142.1	23.9	39.3	383.9	193.8	242.9	120.2	49.7	41.2	1,325.0
1959	3.9	58.0	163.7	114.6	91.2	71.0	323.1	282.7	143.6	57.7	27.9	34.1	1,371.5
1960	4.6	4.0	113.6	19.0	135.4	296.9	313.2	138.1	63.5	7.9	76.5	15.7	1,188.4
1961	18.0	8.7	40.9	102.2	123.7	77.9	267.9	360.7	295.2	48.6	57.9	35.7	1,437.4
1962	1.2	25.7	18.5	91.6	12.5	110.3	180.0	193.2	236.4	36.8	52.2	27.8	986.2
1963	13.3	2.6	57.3	221.1	186.7	383.7	513.6	126.5	50.1	32.1	26.8	12.8	1,626.6
1964	20.3	27.1	37.3	338.5	83.6	107.7	509.2	216.5	382.7	40.4	25.4	5.2	1,793.9
1965	19.1	2.4	16.3	10.4	11.6	23.8	631.6	319.4	27.0	63.7	85.0	5.5	1,215.8
1966	9.7	29.4	90.5	35.7	37.1	179.8	897.7	272.8	302.8	74.9	81.6	6.8	2,018.8
1967	24.8	54.6	88.2	93.1	59.8	135.3	283.8	261.8	158.1	26.5	53.3	9.6	1,248.9
1968	11.3	12.5	56.7	45.2	53.4	41.1	412.4	362.8	126.3	101.8	54.2	11.1	1,288.2
1969	62.2	59.2	13.7	219.3	255.2	31.8	345.9	455.1	230.0	18.4	28.4	17.6	1,736.8
1970	5.9	49.2	12.7	7.5	84.0	249.8	425.6	192.0	465.1	153.1	42.2	21.1	1,708.2
1971	19.3	26.0	42.2	52.7	121.3	135.8	530.6	223.2	159.8	12.8	19.5	16.5	1,359.7
1972	62.3	32.9	76.8	23.4	85.3	28.0	230.8	881.8	133.6	82.6	125.4	6.7	1,769.6
1973	56.9	3.7	13.7	133.0	82.5	107.8	191.4	186.2	90.4	26.4	24.7	11.4	928.1
1974	15.1	23.8	27.7	144.8	239.8	64.3	256.9	319.0	90.6	41.9	10.6	16.2	1,250.7
1975	17.4	6.4	64.2	103.0	83.7	50.5	381.0	99.7	181.3	21.0	36.3	22.9	1,067.4
1976	4.0	108.3	6.8	55.9	43.2	50.0	176.7	462.3	78.7	60.7	30.7	32.2	1,109.5
Ave.	21.7	30.6	49.7	97.1	91.1	138.3	401.7	267.4	176.1	52.7	44.3	21.4	1,392.0

Table B 6 Continued (2)

Chupungryeong (1953-1976)

Unit: mm

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	—	—	—	—	—	—	—	—	—	—	—	—	—
1953	20.6	23.4	57.8	24.3	99.3	321.7	355.5	298.7	29.8	83.6	36.8	41.4	1,392.9
1954	29.1	58.4	50.7	54.1	100.6	156.4	383.3	116.5	152.1	102.6	22.4	38.8	1,265.0
1955	9.9	33.0	24.7	66.6	34.6	120.7	333.4	256.9	99.0	28.5	46.3	15.7	1,069.3
1956	9.4	16.4	167.6	167.7	126.3	265.5	220.3	187.2	198.8	19.1	12.4	18.1	1,408.8
1957	51.3	25.1	32.2	133.6	80.0	146.1	503.6	249.3	1.1	40.4	45.3	52.5	1,360.5
1958	76.8	19.8	17.9	110.8	28.2	70.8	429.7	298.8	251.1	105.8	63.8	52.7	1,526.2
1959	18.4	85.6	102.5	82.2	75.2	120.4	287.0	273.9	214.0	22.3	37.2	34.0	1,352.7
1960	13.5	4.5	40.0	37.5	141.7	161.9	206.6	47.6	139.6	25.8	52.2	11.6	882.5
1961	20.0	26.6	107.6	66.3	76.3	121.4	348.5	302.8	130.4	130.2	67.1	37.9	1,435.1
1962	6.9	15.5	42.6	80.9	13.7	72.4	175.1	255.7	217.9	40.0	51.9	21.0	993.6
1963	13.8	0.9	28.5	104.3	193.1	239.7	250.1	185.3	13.9	20.5	22.7	27.1	1,099.9
1964	26.9	66.5	62.5	235.2	81.4	99.5	287.6	118.7	310.8	28.8	35.5	10.7	1,364.1
1965	25.2	20.5	36.0	60.8	73.9	30.9	540.6	92.0	3.8	16.8	118.5	7.2	1,026.2
1966	2.7	54.4	152.1	41.7	91.5	114.1	298.1	133.9	89.2	108.4	44.9	7.6	1,139.2
1967	27.9	11.0	65.4	77.8	12.3	146.2	167.8	149.3	131.8	24.6	87.2	6.6	902.9
1968	5.7	12.3	46.9	40.9	49.2	52.6	224.2	184.3	48.3	100.8	48.0	8.2	821.5
1969	69.3	48.7	22.9	177.1	95.8	75.3	249.6	244.0	296.9	1.2	46.9	23.6	1,351.3
1970	1.2	77.8	13.6	99.8	100.6	141.3	260.7	239.6	255.2	60.8	25.9	18.0	1,294.5
1971	34.5	43.8	60.7	31.2	80.2	226.4	297.7	208.6	118.4	15.9	11.2	18.1	1,146.7
1972	73.6	41.0	169.5	90.0	164.5	105.7	141.0	275.7	107.9	39.9	128.1	18.2	1,385.1
1973	86.3	23.9	8.4	117.0	118.0	83.8	91.2	124.4	123.5	66.6	37.5	15.4	896.0
1974	27.5	34.8	53.4	146.4	141.0	58.7	439.4	95.7	39.0	66.9	23.6	35.4	1,161.8
1975	24.1	15.2	86.6	137.3	124.5	87.8	468.4	120.5	151.8	50.2	69.8	29.6	1,365.8
1976	10.4	105.4	37.7	65.7	36.5	112.2	80.6	339.3	35.1	41.7	34.9	45.2	944.7
Ave.	28.5	36.0	62.0	93.7	89.1	130.5	293.4	199.9	131.6	51.7	48.8	26.0	1,193.0

Table B 6 Continued (3)

Daegu (1952-1976)													Unit: mm
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	1.2	27.3	61.8	66.4	33.9	24.9	107.2	188.1	198.3	35.5	86.2	17.6	848.4
1953	35.8	43.8	23.5	19.6	73.3	168.8	244.7	108.4	59.3	56.9	39.5	49.0	922.6
1954	18.6	71.8	21.7	68.7	69.2	137.8	251.9	78.8	144.4	65.0	8.0	21.0	956.9
1955	6.8	42.7	19.6	40.4	16.2	108.7	233.4	224.5	48.9	8.0	35.7	10.2	795.1
1956	4.8	3.8	111.4	134.9	126.6	210.2	221.5	193.0	179.1	10.8	14.4	0.7	1,211.2
1957	34.9	15.1	19.6	89.2	55.8	99.0	277.3	243.1	5.0	24.4	47.0	63.3	973.7
1958	30.9	23.6	18.0	126.5	15.0	104.1	328.2	247.3	209.4	96.8	40.2	36.1	1,276.1
1959	17.6	81.2	54.1	99.4	54.9	99.9	164.2	316.1	216.1	12.7	33.7	42.4	1,192.3
1960	9.3	6.0	48.4	34.9	130.8	89.9	144.3	32.2	318.1	35.3	29.4	7.4	886.0
1961	9.5	17.7	99.4	50.6	97.9	87.6	417.5	302.1	125.8	136.1	70.6	42.9	1,457.7
1962	8.1	6.8	16.4	50.8	22.5	83.7	154.3	253.9	205.9	28.8	37.3	5.8	874.3
1963	2.9	1.3	21.3	85.1	110.4	373.1	248.9	135.3	6.9	23.9	4.0	18.7	1,031.8
1964	28.6	51.5	62.9	165.7	69.9	50.3	257.1	11.8	174.1	18.4	13.6	0.2	904.1
1965	27.0	14.1	28.9	43.2	64.5	27.0	532.9	145.0	3.1	13.6	95.8	14.3	1,009.4
1966	2.4	56.1	152.2	39.0	119.0	75.5	165.8	140.6	63.2	84.4	28.4	4.1	930.1
1967	30.1	22.6	57.7	99.3	33.9	186.8	105.8	119.7	146.8	41.4	68.0	2.3	914.4
1968	2.9	6.0	51.2	36.7	32.1	42.2	191.2	288.2	50.3	74.4	21.7	5.6	802.5
1969	49.2	34.1	8.2	109.4	105.5	56.2	238.1	286.9	306.5	—	18.0	19.1	1,231.2
1970	1.2	47.0	14.8	58.2	135.8	128.0	488.9	192.9	168.4	58.4	17.1	8.7	1,319.4
1971	23.4	24.9	36.9	44.0	50.6	152.0	192.2	117.7	65.6	6.1	7.3	1.8	722.5
1972	47.4	19.7	135.8	45.1	150.1	74.7	265.6	251.8	88.3	22.3	81.8	22.6	1,205.2
1973	65.8	16.7	6.6	135.1	98.2	51.5	119.5	120.6	135.3	99.3	13.3	2.5	864.4
1974	11.1	17.2	29.6	130.7	137.1	123.0	390.3	218.9	15.0	92.5	9.6	39.6	1,214.6
1975	17.1	13.7	49.4	99.2	75.8	117.6	302.8	75.0	119.2	62.9	81.4	29.5	1,043.6
1976	0.7	79.1	56.3	96.2	36.6	93.4	44.4	217.0	24.8	43.0	21.3	20.7	733.5
Ave.	19.5	29.8	48.2	78.7	76.6	110.6	243.5	180.4	123.1	46.0	36.9	19.4	1,014.0

Table B 6 Continued (4)

Unit: mm

Busan (1952-1976)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	16.0	32.8	102.5	108.7	105.3	152.4	79.3	98.9	301.7	111.9	62.7	112.1	1,284.3
1953	18.1	71.9	87.2	44.3	202.0	421.4	192.8	116.9	125.3	85.8	36.5	39.0	1,441.2
1954	21.7	159.1	24.1	162.8	209.6	352.8	378.2	108.9	219.7	44.0	22.1	52.3	1,755.3
1955	4.7	124.8	67.5	55.9	76.2	80.7	185.5	285.8	179.8	9.7	53.3	6.4	1,130.3
1956	9.8	28.9	210.6	165.7	191.8	331.3	266.3	345.3	404.6	38.4	29.5	1.6	2,023.8
1957	68.8	46.4	22.3	189.8	77.3	285.8	463.9	178.6	4.1	39.3	44.4	100.8	1,521.5
1958	18.2	27.2	83.6	237.4	48.4	102.3	240.4	252.7	165.5	148.9	50.8	38.4	1,413.8
1959	21.3	129.9	87.2	179.6	166.1	86.1	170.7	86.8	242.2	0.1	71.0	65.1	1,306.1
1960	3.5	34.6	115.9	103.7	213.0	61.5	124.8	45.6	383.9	46.5	56.9	8.7	1,198.6
1961	22.7	21.0	153.8	134.1	179.7	126.5	344.6	320.8	159.2	145.7	186.0	23.5	1,817.6
1962	6.8	16.3	23.3	150.3	45.2	137.4	271.1	292.5	176.7	54.1	48.2	17.5	1,239.4
1963	3.4	3.7	39.4	199.1	242.1	937.5	363.0	171.8	78.1	65.3	20.1	19.3	2,142.8
1964	33.3	94.0	54.0	310.5	150.2	174.6	67.1	28.3	236.6	14.2	12.5	0.1	1,175.6
1965	24.4	25.8	40.2	113.5	99.9	50.2	472.6	359.4	61.9	43.1	168.4	39.0	1,498.4
1966	18.1	65.2	172.4	105.2	125.0	122.5	129.9	108.0	69.0	42.4	93.0	9.9	1,060.6
1967	30.1	40.5	92.9	143.8	58.0	185.8	210.0	52.4	110.5	28.4	80.9	6.0	1,039.3
1968	7.7	14.4	79.0	51.3	135.3	18.3	221.1	347.6	94.7	104.5	47.2	40.6	1,161.7
1969	46.8	60.7	28.0	204.6	112.5	131.1	248.4	437.1	416.0	12.0	54.9	48.3	1,800.4
1970	7.6	47.4	21.2	136.1	230.5	327.1	572.2	300.9	387.7	58.2	22.1	27.1	2,138.1
1971	31.8	48.2	75.0	59.9	100.9	296.4	149.3	238.5	55.3	20.2	3.3	8.5	1,087.3
1972	91.6	44.4	219.5	130.5	207.2	158.7	361.2	388.0	354.3	47.2	156.2	36.7	2,195.5
1973	84.7	43.7	13.1	126.9	329.3	72.2	53.3	17.2	239.2	119.5	41.1	2.9	1,143.1
1974	43.0	41.8	90.9	234.5	371.3	231.5	442.4	75.4	16.6	108.2	14.2	28.1	1,697.9
1975	31.2	17.9	93.3	243.9	180.5	135.4	253.8	79.1	270.8	57.2	130.2	42.9	1,536.2
1976	0.7	103.1	68.5	219.5	94.6	100.8	95.0	175.0	58.7	68.8	31.9	35.3	1,051.9
Ave.	26.6	53.7	82.6	152.5	158.1	203.2	254.3	196.5	192.5	60.5	61.5	32.4	1,477.0

Table B 6 Continued (5)

Gwangju (1952-1976)													Unit: mm
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	19.1	30.1	55.0	194.1	98.3	85.7	56.1	363.2	517.3	75.1	50.4	17.3	1,561.7
1953	12.8	41.7	73.3	21.5	122.7	348.0	234.5	81.3	69.5	49.9	27.4	75.2	1,157.8
1954	19.5	107.8	32.8	50.1	169.3	155.7	354.0	260.3	137.7	58.5	3.7	32.1	1,381.5
1955	18.3	51.1	30.0	27.5	14.4	50.0	420.8	217.4	98.1	12.5	33.5	11.5	985.1
1956	13.4	8.8	224.2	157.4	168.0	302.1	131.0	117.0	344.8	23.3	19.3	4.9	1,514.2
1957	50.6	19.4	7.5	152.5	70.7	128.8	352.5	259.2	0.4	34.3	82.2	63.5	1,221.6
1958	57.4	17.2	31.9	218.5	41.3	192.3	170.2	331.2	269.4	108.9	43.2	32.8	1,514.3
1959	55.9	98.4	77.7	121.1	95.7	47.5	164.6	149.7	214.3	0.6	66.3	62.1	1,153.9
1960	27.4	9.7	66.8	45.3	147.6	126.6	219.2	181.8	239.3	18.1	46.2	27.9	1,155.9
1961	34.7	20.8	166.7	100.0	123.9	113.8	291.4	343.9	134.8	101.5	81.9	25.3	1,538.7
1962	18.7	32.4	13.1	101.8	14.5	131.5	385.1	343.7	318.2	36.9	49.7	21.7	1,467.3
1963	39.3	7.9	41.7	146.3	225.5	543.2	284.0	53.4	38.8	34.9	28.4	27.9	1,471.3
1964	29.6	92.7	63.5	188.0	75.0	109.1	181.6	129.1	307.6	27.0	33.3	2.9	1,239.4
1965	66.0	36.9	19.5	83.2	85.2	68.7	531.3	174.8	9.3	32.6	105.9	44.3	1,257.7
1966	14.0	56.8	151.1	80.6	137.6	118.5	134.2	252.2	94.6	37.2	56.1	20.3	1,153.2
1967	24.7	39.6	72.4	88.1	23.7	148.9	134.8	27.8	38.8	21.8	134.5	23.9	779.0
1968	14.2	25.1	70.2	59.7	34.5	52.0	35.7	196.3	97.4	172.7	42.5	34.9	835.2
1969	84.1	61.0	32.9	217.1	160.4	67.8	205.4	334.1	474.0	3.6	28.1	55.1	1,723.6
1970	4.1	62.5	12.8	110.2	91.2	154.3	338.0	123.7	248.7	131.2	25.0	12.1	1,313.8
1971	45.0	48.2	42.9	55.6	74.7	264.7	358.6	170.7	166.9	22.8	29.2	12.4	1,291.7
1972	93.6	33.2	172.5	87.1	176.1	83.0	494.3	310.7	97.0	33.3	175.2	68.6	1,824.6
1973	48.7	46.0	13.8	153.2	164.3	67.9	231.6	125.8	190.4	87.7	16.7	25.2	1,171.3
1974	21.3	43.9	62.2	184.8	206.2	126.2	506.2	353.7	34.5	125.8	23.9	40.8	1,729.5
1975	17.2	21.9	54.9	173.0	112.6	133.7	362.7	169.7	195.6	113.3	36.6	45.4	1,436.6
1976	22.4	108.5	59.5	126.1	82.9	186.9	99.3	214.7	55.7	56.0	36.1	40.9	1,089.0
Ave.	34.1	44.9	66.0	117.7	108.7	152.3	267.1	211.4	175.7	56.8	51.0	33.2	1,319.0

Table B 6 Continued (6)

Jeonju (1952-1976)													Unit: mm
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	10.7	18.9	70.6	70.8	78.8	54.9	63.9	346.4	254.0	79.2	76.3	20.9	1,145.3
1953	10.3	34.7	84.4	35.0	75.7	265.5	525.5	180.7	30.2	69.7	32.7	53.2	1,397.6
1954	20.5	88.3	67.1	51.5	124.9	103.5	448.3	191.7	111.3	71.4	5.0	42.2	1,325.7
1955	22.3	33.2	39.4	69.7	27.2	101.1	301.1	340.1	104.5	31.3	57.6	16.7	1,144.2
1956	19.1	12.6	185.5	182.3	141.8	214.9	270.5	124.0	243.5	28.1	13.5	9.1	1,444.9
1957	65.6	29.5	21.0	188.3	86.1	94.6	460.5	161.4	2.4	49.7	62.1	77.9	1,299.1
1958	79.9	20.5	13.9	145.7	36.0	90.5	447.2	298.3	424.6	103.8	49.0	34.0	1,732.6
1959	22.4	99.6	106.7	116.3	109.1	55.3	171.7	379.7	201.4	10.4	43.5	33.9	1,350.0
1960	9.9	6.5	47.8	40.6	154.9	218.8	281.6	134.8	167.9	23.6	44.2	22.2	1,152.8
1961	33.9	26.8	98.0	77.7	80.4	156.6	265.8	553.1	238.3	126.6	71.1	45.1	1,773.4
1962	19.1	17.0	28.9	67.9	15.6	86.1	237.3	303.8	256.0	36.3	44.5	29.1	1,141.6
1963	30.1	8.2	34.0	125.0	246.5	394.1	355.8	242.5	15.7	22.0	29.0	28.8	1,531.7
1964	26.6	75.7	57.4	359.1	92.6	97.0	389.4	82.9	316.9	41.5	46.5	8.5	1,594.1
1965	50.9	30.6	24.0	62.9	60.2	23.7	570.1	128.3	9.0	31.4	94.7	7.3	1,093.7
1966	3.7	58.3	156.9	45.9	121.5	89.2	223.9	258.1	144.3	118.8	50.0	18.1	1,288.8
1967	30.6	33.4	73.3	75.9	30.4	174.8	154.9	139.0	59.2	41.4	120.3	19.4	952.6
1968	21.8	35.6	83.4	48.2	36.8	57.7	99.3	252.1	76.5	95.1	90.6	19.8	916.9
1969	100.5	61.2	31.5	218.2	188.2	106.4	346.8	291.1	298.2	0.2	40.7	56.9	1,739.9
1970	2.3	66.9	16.5	111.4	83.2	113.6	248.1	228.1	259.5	102.8	38.9	13.8	1,285.1
1971	61.0	50.0	36.4	51.3	81.2	227.8	299.0	219.0	210.0	21.0	25.1	19.1	1,300.9
1972	81.4	29.6	170.4	48.7	149.9	86.9	217.6	279.1	95.5	33.3	138.2	30.0	1,360.6
1973	70.0	22.2	7.2	116.3	91.6	57.2	147.0	183.0	153.7	83.4	31.1	21.3	984.0
1974	26.3	39.2	62.7	137.9	201.4	63.1	419.2	118.5	59.8	125.9	18.6	37.9	1,310.5
1975	7.1	15.3	52.7	145.7	138.4	150.1	406.5	115.4	251.8	61.7	44.1	32.2	1,418.0
1976	17.6	98.8	28.4	83.9	57.7	143.4	94.1	374.6	39.8	44.7	29.4	44.9	1,057.3
Ave.	33.7	41.0	64.0	107.0	100.4	129.1	297.8	237.0	161.0	58.1	51.9	29.7	1,311.0

Table B 7 MONTHLY EVAPORATION

Seoul (1954-1976)

Unit: mm

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	—	—	—	—	—	—	—	—	—	—	—	—	—
1953	—	—	—	—	—	—	—	—	—	—	—	—	—
1954	40.8	50.4	92.6	128.3	144.4	117.5	103.5	120.8	93.1	80.1	64.1	43.5	1,079.1
1955	42.4	49.6	77.4	113.2	143.2	132.4	110.1	166.0	122.1	85.2	56.0	41.1	1,138.7
1956	41.2	48.6	57.5	97.3	135.2	104.3	105.0	151.4	98.1	89.4	58.3	34.9	1,021.2
1957	28.9	43.0	65.2	103.9	184.4	154.4	93.4	114.9	142.7	84.5	61.9	36.6	1,113.8
1958	29.5	39.2	76.0	110.0	166.7	183.6	135.9	126.8	93.2	83.2	46.6	38.3	1,129.0
1959	40.2	46.4	79.0	108.2	164.2	127.1	123.2	168.0	101.0	100.2	52.4	39.1	1,149.0
1960	42.0	59.1	87.3	136.2	158.2	128.9	130.2	160.6	110.2	102.6	58.1	42.2	1,215.6
1961	36.7	51.8	87.1	139.6	164.4	138.3	127.5	144.2	121.5	99.6	61.4	41.1	1,213.2
1962	42.3	48.1	73.9	108.0	200.2	162.3	155.4	109.0	94.3	84.4	57.6	35.4	1,170.9
1963	35.3	41.0	91.6	85.6	109.0	110.2	95.3	131.4	127.6	90.0	57.2	40.9	1,015.1
1964	35.1	39.6	76.0	89.0	156.2	143.4	92.8	129.8	81.5	80.6	58.2	42.0	1,024.2
1965	35.0	42.0	79.6	120.0	148.3	190.8	115.7	103.7	128.3	87.2	57.2	42.7	1,150.5
1966	48.1	42.3	66.2	115.9	171.6	131.1	84.8	121.7	97.1	80.5	58.8	40.8	1,058.9
1967	45.2	46.9	73.8	93.3	160.6	125.2	124.9	109.0	107.0	86.7	50.7	35.5	1,058.8
1968	41.0	48.9	76.9	142.8	136.7	168.5	114.6	142.5	120.7	74.8	42.0	35.2	1,144.6
1969	32.2	34.7	78.7	92.1	141.9	166.8	130.1	138.2	97.3	107.1	54.5	34.0	1,107.6
1970	38.5	45.3	77.4	144.2	160.6	114.9	76.2	123.1	96.9	87.7	57.1	37.3	1,059.2
1971	30.8	43.8	75.2	124.5	148.2	122.5	94.9	110.7	113.1	113.4	84.7	51.6	1,113.4
1972	37.3	45.8	85.2	115.5	146.3	172.9	135.9	106.3	103.7	87.6	51.9	40.3	1,128.7
1973	38.4	56.4	94.4	107.8	156.7	135.9	155.6	113.4	97.2	82.1	54.1	37.0	1,129.0
1974	37.2	37.1	68.7	106.3	136.3	160.2	106.6	133.6	121.5	84.1	56.9	38.6	1,087.1
1975	43.4	53.8	74.1	123.3	133.0	139.6	115.6	166.3	114.7	87.1	65.6	46.8	1,163.3
1976	45.1	48.7	83.0	113.9	153.7	141.9	121.4	92.7	111.5	80.5	55.8	42.6	1,090.8
Ave.	37.2	46.2	78.1	113.9	153.0	142.3	115.2	129.7	108.4	88.6	57.4	39.9	1,109.0

Table B 7 Continued (2)

Chupungryeong (1953-1976)													Unit: mm
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	—	—	—	—	—	—	—	—	—	—	—	—	—
1953	66.8	63.5	97.1	196.0	197.7	128.1	139.4	159.0	143.5	129.8	88.7	56.8	1,466.4
1954	53.7	61.2	135.8	164.5	185.2	121.8	106.7	152.0	122.4	97.4	75.4	58.8	1,334.9
1955	56.4	60.5	73.1	125.7	174.0	165.7	136.3	156.7	108.2	97.5	65.2	58.3	1,227.6
1956	54.2	61.5	63.4	124.5	152.2	112.5	125.0	143.9	81.8	89.9	68.7	58.5	1,136.1
1957	49.2	52.3	90.6	122.6	193.7	135.2	83.6	118.5	138.9	111.8	67.1	52.9	1,216.5
1958	50.6	62.8	111.6	122.4	197.1	216.5	159.9	113.6	106.3	78.9	58.8	49.1	1,327.6
1959	58.5	49.2	95.5	121.2	188.7	160.7	165.3	154.7	92.4	115.3	67.8	55.4	1,324.7
1960	54.9	78.5	102.7	147.9	169.1	165.1	183.2	199.5	104.8	102.5	73.8	57.8	1,439.8
1961	55.5	77.5	110.0	175.5	181.4	151.6	158.5	141.6	111.2	90.3	68.3	56.6	1,377.4
1962	65.7	74.6	118.1	139.2	265.3	191.2	164.8	149.9	92.1	105.7	57.3	58.6	1,482.5
1963	51.2	77.0	124.3	84.2	132.7	106.8	107.1	156.3	141.6	110.4	72.1	53.3	1,217.0
1964	56.7	63.6	108.7	80.7	186.2	183.4	172.8	184.7	112.4	95.6	73.1	64.5	1,382.4
1965	71.6	84.7	134.6	165.0	203.8	231.1	113.0	167.2	174.8	130.6	70.8	67.5	1,647.7
1966	80.3	69.8	92.1	137.5	201.0	178.1	138.7	159.3	94.5	101.0	86.8	57.9	1,397.0
1967	56.2	59.7	105.4	125.2	222.5	186.5	143.1	176.8	110.4	112.8	54.5	36.3	1,389.4
1968	52.4	54.3	109.5	162.7	151.3	188.9	150.2	154.1	122.8	74.8	51.7	44.4	1,317.1
1969	38.9	50.0	96.2	119.3	179.0	180.9	126.6	121.0	84.5	107.3	67.6	54.2	1,225.5
1970	61.5	75.3	111.9	146.0	170.9	121.7	118.8	117.6	74.6	89.0	67.7	55.5	1,210.5
1971	49.4	50.7	87.3	161.9	187.5	131.9	141.3	123.6	119.7	109.1	78.2	62.5	1,303.1
1972	36.2	53.7	81.8	131.6	138.5	158.8	149.9	128.9	97.9	93.4	47.9	44.0	1,162.6
1973	39.8	65.7	127.8	139.1	164.7	142.6	174.4	162.8	111.7	81.5	71.0	53.9	1,335.0
1974	47.5	43.0	81.9	141.3	167.7	181.4	87.6	158.7	141.2	96.9	70.7	39.6	1,257.5
1975	48.9	60.0	87.6	124.9	147.0	136.8	115.4	159.8	109.7	77.3	54.5	63.9	1,185.8
1976	67.1	50.6	96.2	118.1	161.0	145.6	107.4	104.6	116.8	93.2	65.8	48.4	1,174.8
Ave.	55.1	62.5	101.8	136.5	179.9	159.3	136.2	148.5	113.1	99.7	67.6	54.5	1,317.0

Table B 7 Continued (3)

Daegu (1952-1976)													Unit: mm
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	67.6	66.9	92.5	130.5	191.5	233.9	203.0	214.9	101.0	101.2	54.1	52.7	1,509.8
1953	59.7	56.4	102.3	162.8	171.0	122.0	140.5	184.4	125.9	125.9	73.3	62.3	1,386.5
1954	51.9	68.7	124.0	136.7	152.4	140.7	128.8	156.2	111.1	91.8	78.2	74.8	1,315.3
1955	74.8	61.4	81.8	129.6	172.4	175.7	166.9	211.6	126.9	115.6	78.4	72.3	1,467.4
1956	73.0	89.4	80.2	120.0	154.3	134.8	149.3	172.3	96.5	101.2	80.3	68.8	1,320.1
1957	63.6	69.1	110.3	136.4	183.2	155.5	100.3	120.6	146.5	116.9	69.7	58.0	1,330.1
1958	61.6	67.8	121.5	130.9	178.4	206.1	163.4	115.5	97.2	81.3	57.5	52.1	1,333.3
1959	67.2	51.1	100.9	119.7	174.4	167.6	168.5	144.4	93.2	111.1	71.0	62.2	1,331.3
1960	67.1	84.1	118.8	148.8	148.7	199.9	188.9	227.2	99.5	90.0	65.7	71.1	1,509.8
1961	73.2	80.0	103.3	153.2	153.0	150.1	137.9	142.8	115.4	89.5	65.9	68.0	1,332.3
1962	75.7	73.9	133.0	140.5	219.1	188.4	158.7	156.1	92.5	89.2	62.7	64.3	1,454.1
1963	64.9	76.7	133.1	95.4	130.2	100.2	139.6	125.4	138.1	101.4	81.5	65.1	1,251.6
1964	45.2	59.9	110.7	97.1	175.6	195.9	215.4	247.1	116.5	86.8	80.6	64.9	1,495.7
1965	79.2	72.0	140.1	158.9	200.5	229.5	130.4	171.2	160.5	118.0	74.3	72.3	1,607.2
1966	75.0	70.6	89.3	131.8	169.3	154.4	160.7	172.5	97.6	80.7	70.3	49.9	1,332.1
1967	58.7	60.5	91.9	110.6	203.7	184.2	176.4	211.2	114.0	103.0	52.4	44.7	1,411.3
1968	56.7	63.9	110.8	144.2	156.5	203.3	155.4	156.1	121.2	77.4	50.7	53.8	1,350.0
1969	52.7	49.1	108.2	134.0	168.2	167.9	134.7	159.6	95.3	96.3	72.5	47.1	1,285.6
1970	61.3	71.6	118.1	146.3	143.0	129.9	128.0	132.8	84.5	76.6	59.5	44.7	1,196.3
1971	43.5	59.0	96.3	147.6	167.1	120.8	149.4	143.2	111.9	109.2	73.3	66.4	1,287.7
1972	46.9	55.8	72.1	122.5	15.26	175.7	161.4	144.4	114.9	92.6	53.7	43.4	1,236.0
1973	38.1	67.9	119.4	131.1	178.9	190.3	265.3	230.6	136.1	82.2	79.5	59.1	1,578.5
1974	52.4	46.6	87.3	145.4	166.8	173.1	92.4	185.1	134.5	95.3	66.0	50.4	1,295.3
1975	55.7	58.1	94.6	126.6	155.3	134.3	144.4	163.1	108.0	75.8	51.3	57.5	1,224.7
1976	65.7	52.4	92.1	116.7	159.5	149.3	143.4	143.9	110.8	93.1	53.8	37.1	1,217.8
Ave.	61.3	65.3	105.3	132.7	169.0	167.3	156.1	169.3	114.0	96.1	67.1	58.5	1,361.0

Table B 7. Continued (4)

Busan (1952-1976)													Unit: mm
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	85.7	75.0	107.5	120.1	146.6	134.1	137.6	167.5	109.2	120.8	85.7	80.2	1,370.0
1953	89.5	85.7	112.7	158.2	119.8	90.0	122.4	167.5	114.6	132.8	105.9	83.7	1,382.8
1954	71.4	85.8	129.8	112.5	106.5	103.4	84.0	140.1	128.1	116.9	112.0	109.2	1,299.7
1955	85.4	79.3	88.5	123.0	139.1	144.6	119.0	189.6	126.3	133.8	104.3	102.3	1,435.2
1956	82.9	85.1	69.8	112.4	132.5	106.2	116.5	138.6	99.5	114.7	106.9	88.1	1,253.2
1957	80.0	83.1	120.4	123.6	149.2	126.8	69.4	116.9	160.6	135.5	99.4	84.8	1,349.7
1958	77.5	79.6	119.6	109.3	161.1	153.0	137.1	127.0	129.9	115.9	94.6	86.5	1,391.1
1959	90.6	71.4	114.7	126.5	140.9	154.1	157.3	151.1	100.2	136.4	94.0	98.5	1,435.7
1960	87.4	100.8	105.0	138.8	126.7	131.6	150.0	213.9	100.9	121.5	99.0	98.1	1,473.7
1961	85.8	88.7	102.2	139.6	125.5	114.8	134.5	143.5	146.0	120.6	93.7	101.3	1,396.2
1962	107.2	94.8	143.7	128.5	175.1	132.1	130.2	140.7	122.2	108.2	91.1	91.4	1,465.2
1963	95.4	97.9	100.5	74.3	94.7	69.6	115.7	120.5	119.8	103.3	86.0	73.4	1,151.1
1964	70.2	80.4	105.6	64.2	128.9	135.5	163.9	197.0	99.5	110.2	104.7	91.1	1,351.2
1965	87.7	82.2	121.6	120.5	134.8	131.8	77.5	144.6	134.6	106.2	66.6	74.2	1,282.3
1966	77.1	68.4	84.6	92.3	124.9	121.9	110.9	153.2	114.5	103.2	95.8	102.4	1,249.2
1967	94.0	83.2	97.3	86.7	140.8	151.5	131.0	196.7	135.1	127.8	84.8	71.2	1,400.1
1968	64.8	66.5	93.5	115.2	119.3	147.1	118.6	156.1	97.7	100.6	83.6	63.6	1,226.6
1969	46.2	55.1	86.5	89.5	125.3	135.4	112.9	135.3	94.3	113.3	82.8	59.1	1,135.7
1970	71.6	66.8	108.3	99.1	112.8	93.9	105.7	141.4	97.7	88.4	88.8	76.4	1,150.9
1971	68.2	70.9	92.4	124.4	138.3	95.7	126.3	141.8	110.8	121.2	88.8	102.9	1,281.7
1972	74.2	73.4	94.7	97.4	120.0	120.0	136.7	124.2	104.7	107.8	69.5	70.2	1,192.8
1973	56.6	73.0	114.1	112.4	125.3	130.1	180.9	172.8	109.1	84.9	81.1	78.9	1,319.2
1974	68.7	67.2	83.7	120.9	123.5	114.9	66.1	137.7	117.8	120.3	101.7	68.9	1,191.4
1975	72.8	83.8	98.8	107.3	119.6	111.5	121.3	148.7	97.4	96.5	65.6	73.2	1,196.5
1976	81.3	63.0	94.0	99.6	120.4	111.8	120.4	132.7	105.2	99.5	86.4	73.9	1,188.2
Ave.	78.9	78.4	103.6	111.9	130.1	122.5	121.8	152.0	115.0	113.6	90.9	84.1	1,304.0

Table B 7 Continued (5)

Gwangju (1952-1976)													Unit: mm
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	54.5	57.0	82.9	128.0	149.8	190.2	184.1	180.7	107.8	110.9	65.8	42.2	1,353.9
1953	53.7	54.7	90.7	153.4	170.5	123.7	152.8	177.2	121.3	111.0	70.5	53.8	1,333.3
1954	53.5	66.0	113.8	131.2	148.8	142.8	117.4	177.2	118.3	101.4	85.4	68.7	1,324.5
1955	59.0	66.2	79.2	126.4	181.6	181.6	175.5	169.3	149.8	110.2	73.4	70.3	1,442.5
1956	82.9	85.1	69.8	112.4	132.5	106.2	116.5	138.6	99.5	114.7	106.9	88.1	1,253.2
1957	54.0	61.1	100.0	117.0	179.3	148.5	113.1	150.8	156.8	117.5	69.8	46.4	1,313.4
1958	46.6	62.6	100.5	114.3	167.8	218.7	169.2	146.3	122.5	89.7	68.4	52.7	1,359.3
1959	53.7	49.1	99.1	118.0	159.8	178.7	176.3	215.8	106.8	137.4	73.4	50.5	1,418.6
1960	58.2	75.0	112.6	141.1	162.3	191.1	211.5	217.3	113.2	117.9	69.6	50.1	1,519.9
1961	51.3	75.9	102.2	152.1	154.7	138.5	179.3	172.1	116.1	101.3	59.5	46.2	1,349.2
1962	42.8	56.1	106.9	128.3	199.0	166.9	139.7	149.1	99.9	82.1	53.9	41.6	1,266.3
1963	32.3	51.2	93.6	79.2	87.1	90.7	115.1	126.6	125.1	99.6	61.0	47.2	1,008.7
1964	50.0	52.6	101.7	81.5	152.4	146.9	155.7	161.4	115.0	83.3	55.3	44.1	1,199.9
1965	41.9	51.2	99.1	121.6	126.6	145.6	104.7	149.5	133.0	100.7	55.5	49.4	1,178.8
1966	49.5	50.7	67.4	104.8	150.7	153.5	134.8	151.9	105.4	86.5	64.0	45.2	1,164.4
1967	45.2	50.6	79.6	97.2	167.5	161.9	133.8	181.8	141.3	122.8	52.2	33.8	1,267.7
1968	39.7	50.6	94.7	133.8	131.2	174.2	189.1	140.9	123.0	79.0	52.3	38.0	1,246.5
1969	29.3	43.7	90.6	97.6	135.9	158.4	147.9	154.8	92.8	99.0	61.6	35.9	1,147.5
1970	51.3	59.6	105.2	118.9	139.2	113.7	130.7	156.6	87.5	77.1	60.7	46.4	1,146.9
1971	41.7	49.1	91.4	151.6	164.0	156.6	149.6	138.5	112.2	97.9	59.4	55.2	1,267.2
1972	43.9	41.7	85.4	105.9	118.6	162.0	144.5	159.7	121.8	96.5	48.6	46.6	1,175.2
1973	45.2	54.5	107.7	125.4	138.0	217.8	238.4	199.5	112.6	79.8	64.6	37.4	1,420.9
1974	42.1	46.3	78.8	127.9	160.8	187.8	107.9	184.7	136.9	94.8	65.0	53.8	1,286.8
1975	48.2	52.9	96.3	110.9	146.1	145.6	161.3	185.9	117.4	86.0	59.0	42.1	1,251.7
1976	36.4	56.3	100.9	116.4	137.7	147.1	178.9	146.7	126.9	99.0	61.3	38.6	1,246.2
Ave.	48.3	56.8	94.0	119.8	150.5	157.9	153.1	165.3	118.5	100.0	64.7	49.0	1,279.0

Table B 7 Continued (6)

Jeonju (1952-1976)													Unit: mm
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	51.7	50.2	71.9	109.2	164.2	209.2	195.7	158.5	96.5	92.2	50.0	41.7	1,291.0
1953	49.0	46.0	86.5	143.1	163.6	104.8	137.0	149.2	120.4	106.9	59.7	40.1	1,206.3
1954	33.4	50.9	94.4	112.5	126.5	133.3	118.9	160.8	98.9	79.2	61.5	46.5	1,116.8
1955	45.2	51.7	70.6	114.7	154.7	164.6	149.4	145.5	112.9	91.5	56.1	46.3	1,203.2
1956	42.3	52.4	60.4	114.2	129.3	125.2	140.4	179.3	103.8	86.1	65.6	48.8	1,147.8
1957	41.0	49.3	72.7	109.0	153.9	130.8	93.7	122.9	137.4	99.2	65.4	44.4	1,119.7
1958	37.8	51.4	93.5	107.1	161.9	214.9	167.4	133.8	100.0	79.9	46.0	48.9	1,242.6
1959	40.3	41.3	88.8	106.3	159.4	171.6	153.7	194.4	95.4	115.6	55.6	35.1	1,257.5
1960	42.3	49.4	85.7	120.7	138.5	148.7	172.5	179.6	103.6	86.7	53.7	40.0	1,221.4
1961	41.4	48.6	76.7	125.5	136.4	128.1	143.4	137.9	100.0	82.2	51.0	42.3	1,113.5
1962	35.9	47.9	88.6	115.9	195.0	160.5	152.0	129.1	93.2	88.6	54.3	41.0	1,202.0
1963	36.8	48.1	96.0	82.0	115.5	113.0	130.7	146.0	131.1	106.8	56.7	39.4	1,102.1
1964	36.7	45.4	87.6	102.1	152.8	153.3	150.1	180.6	105.2	82.7	58.1	27.0	1,181.6
1965	38.3	45.6	88.9	118.8	155.4	170.1	97.6	142.0	133.2	94.1	54.3	52.0	1,190.3
1966	46.9	48.3	72.5	108.1	173.7	164.1	134.5	150.3	99.5	84.3	61.6	38.6	1,182.4
1967	25.6	22.2	52.5	100.8	186.0	183.7	148.4	154.3	108.4	100.5	42.9	25.2	1,150.5
1968	30.2	36.6	67.8	135.0	130.6	179.9	120.1	108.9	116.5	71.3	42.9	32.7	1,072.5
1969	29.8	28.7	63.5	92.0	129.8	141.2	109.0	123.6	97.5	89.8	44.7	28.9	978.5
1970	38.8	42.8	66.9	101.1	127.5	105.9	106.2	120.4	72.7	70.5	54.9	31.2	939.0
1971	18.8	26.4	71.6	106.9	146.1	114.8	118.8	116.9	95.9	81.5	41.9	34.2	973.8
1972	26.2	29.2	53.0	84.6	107.1	138.7	135.9	118.9	93.7	85.4	40.0	35.2	947.9
1973	31.1	35.1	74.2	103.9	129.4	135.5	168.9	163.0	104.4	70.0	48.2	35.3	1,099.0
1974	28.4	30.4	47.1	94.8	129.8	148.2	99.3	160.2	103.6	70.1	44.2	31.2	987.3
1975	27.0	31.2	63.9	92.2	130.1	108.0	111.5	150.6	98.4	63.2	47.8	37.4	961.3
1976	30.8	39.0	62.2	93.5	123.6	138.8	120.2	120.6	107.3	82.2	39.2	23.6	981.0
Ave.	36.2	42.0	74.3	107.8	144.8	147.5	135.0	145.9	105.2	86.4	51.9	37.9	1,115.0

Table B 8 MONTHLY MEAN WIND VELOCITY

Seoul (1954-1976)

Unit: m/sec.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	--	--	--	--	--	--	--	--	--	--	--	--	--
1953	--	--	--	--	--	--	--	--	--	--	--	--	--
1954	2.1	2.6	3.0	3.0	2.6	2.8	2.9	2.3	2.2	2.0	2.0	2.4	2.5
1955	2.5	2.7	2.8	3.4	2.6	2.4	2.6	2.1	2.0	2.2	2.4	2.2	2.5
1956	2.5	2.9	3.0	2.9	2.9	2.5	1.8	2.1	1.8	1.8	2.3	2.3	2.4
1957	2.0	3.2	2.9	3.1	2.6	2.3	2.5	2.1	1.8	2.0	2.1	2.3	2.4
1958	2.8	2.2	2.8	2.9	2.5	2.1	2.2	1.9	1.6	2.0	1.7	2.0	2.2
1959	2.7	3.1	2.9	3.1	2.3	2.3	2.2	2.3	1.6	1.7	1.9	1.9	2.3
1960	2.3	2.5	2.4	2.8	2.7	2.2	2.1	2.0	1.8	1.3	2.2	2.6	2.2
1961	2.4	3.1	3.0	3.1	2.4	1.6	1.9	1.7	1.6	1.8	2.2	1.7	2.2
1962	1.7	1.9	3.0	3.1	2.5	2.1	2.2	2.1	2.1	1.4	2.1	1.9	2.2
1963	2.9	2.7	3.0	3.0	2.3	2.2	2.4	1.9	2.2	1.9	2.4	2.4	2.4
1964	2.3	2.6	2.8	2.8	2.2	2.0	2.2	2.6	2.0	1.3	1.9	2.3	2.3
1965	2.7	2.9	3.2	3.0	2.8	2.1	2.3	2.2	2.2	2.1	2.6	2.9	2.6
1966	2.7	2.8	3.3	2.8	2.5	2.1	2.3	1.9	1.9	2.3	2.6	2.3	2.5
1967	2.8	2.8	2.9	3.0	2.4	2.2	2.3	2.4	2.0	2.2	2.5	2.6	2.5
1968	3.0	2.9	3.2	2.8	2.7	2.5	2.4	2.4	2.3	2.2	2.4	2.6	2.6
1969	2.7	2.8	2.9	3.1	2.5	2.3	2.7	2.5	1.9	2.1	2.5	2.7	2.6
1970	2.5	2.9	3.2	2.9	2.7	2.3	2.3	2.6	2.1	1.9	2.5	2.6	2.5
1971	2.4	2.7	3.4	2.7	2.6	2.2	2.5	2.2	2.2	2.0	2.2	2.8	2.5
1972	2.7	2.8	2.8	2.8	3.0	2.5	2.4	2.6	2.3	2.4	2.6	2.4	2.6
1973	2.2	2.8	3.2	3.3	3.1	2.3	2.3	2.0	2.0	2.2	2.9	2.8	2.6
1974	2.1	2.7	3.0	3.5	2.7	2.6	2.1	2.4	2.1	2.2	2.2	2.3	2.5
1975	2.7	3.0	2.8	2.9	2.3	1.9	2.1	1.7	1.8	1.7	2.4	2.3	2.3
1976	3.0	2.6	2.7	2.5	2.5	2.1	2.3	2.0	1.8	1.8	2.4	2.6	2.4
Ave.	2.5	2.7	3.0	3.0	2.6	2.2	2.3	2.2	2.0	1.9	2.3	2.4	2.4

Table B 8 Continued (2)

Chupungryeong (1954-1976)													Unit: m/sec.
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	—	—	—	—	—	—	—	—	—	—	—	—	—
1953	—	—	—	3.4	3.0	2.4	1.7	2.1	1.8	2.1	3.3	3.6	2.0
1954	3.4	3.7	4.0	3.0	2.6	2.9	2.4	1.8	2.2	2.3	2.2	3.7	2.9
1955	3.6	2.9	2.1	2.3	2.5	1.9	1.7	1.4	1.4	2.1	3.4	4.0	2.4
1956	4.2	4.7	2.9	3.2	3.3	2.3	1.5	2.0	1.7	2.0	3.5	4.6	3.0
1957	4.0	4.3	4.0	3.6	2.9	2.3	1.9	2.4	2.1	2.8	2.5	3.7	3.0
1958	5.2	3.6	3.9	3.2	3.3	2.1	2.0	1.7	1.5	1.9	2.4	3.3	2.8
1959	4.7	3.0	3.2	3.4	2.6	1.9	2.0	1.6	1.9	2.0	3.2	3.8	2.8
1960	4.0	4.2	3.2	3.4	2.9	2.4	2.3	2.3	1.9	1.6	2.7	3.6	2.9
1961	4.2	4.2	3.4	3.7	3.0	2.2	1.5	1.7	2.0	2.3	3.0	3.7	2.8
1962	4.4	3.8	3.9	3.7	3.0	2.0	2.3	2.4	2.4	2.2	3.1	3.6	3.1
1963	5.8	4.5	3.7	2.9	2.9	2.4	2.1	2.5	3.0	2.2	3.3	3.9	3.3
1964	3.5	3.7	3.8	2.9	3.2	2.9	2.6	2.3	2.4	2.5	3.6	3.4	3.1
1965	4.5	4.8	5.3	4.0	3.4	2.0	3.2	2.2	2.8	2.8	3.3	4.5	3.6
1966	5.2	4.2	4.1	3.4	2.8	2.0	2.3	2.2	2.1	2.8	3.0	3.9	3.2
1967	5.1	4.5	3.7	2.9	2.7	2.6	2.3	2.4	1.7	2.7	3.2	4.0	3.2
1968	5.4	4.9	4.3	2.7	2.9	2.7	2.2	2.0	2.0	2.5	3.0	3.2	3.2
1969	4.1	3.7	3.7	3.6	3.0	2.4	1.9	1.7	2.1	2.4	3.2	3.9	3.0
1970	4.3	4.2	4.7	3.2	3.4	2.4	1.9	2.2	2.0	2.2	3.4	4.4	3.2
1971	4.0	4.0	4.7	3.5	3.2	2.9	2.2	2.8	2.4	3.0	2.9	4.3	3.3
1972	3.1	4.2	3.3	2.8	3.3	2.4	2.6	2.0	2.5	2.9	3.6	3.5	3.0
1973	3.0	4.2	4.4	3.7	3.5	2.5	2.5	2.5	2.3	2.9	3.4	4.8	3.3
1974	3.4	3.5	3.5	3.4	2.7	2.6	2.1	2.4	2.4	3.1	3.0	3.2	2.9
1975	4.3	4.5	4.0	3.2	2.7	2.2	1.9	1.7	1.9	2.0	2.8	4.6	3.0
1976	4.8	3.1	3.6	3.1	3.0	2.5	2.2	2.0	2.0	2.5	3.2	3.2	2.9
Ave.	4.3	4.0	3.8	3.3	3.0	2.4	2.0	2.1	2.1	2.4	2.8	3.9	3.0

Table B 8 Continued (3)

Daegu (1952-1976)													Unit: m/sec.
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	3.6	3.4	3.7	3.8	3.2	3.6	3.8	3.4	2.3	2.3	1.9	3.1	3.2
1953	4.2	3.5	3.9	3.5	3.5	3.5	2.9	3.5	2.3	2.5	3.1	3.2	3.3
1954	3.2	3.6	3.8	3.8	3.2	4.2	4.0	2.9	2.8	2.7	2.6	3.7	3.4
1955	4.1	3.1	3.4	3.7	2.7	2.9	2.4	3.0	2.9	3.3	3.3	3.3	3.2
1956	3.7	4.4	4.0	3.2	3.0	3.3	2.8	2.8	2.4	2.5	2.9	3.9	3.2
1957	3.1	3.8	3.8	3.8	2.9	2.7	2.9	3.2	2.7	2.6	2.5	3.2	3.1
1958	4.2	2.8	2.7	3.4	3.2	3.0	3.5	2.5	2.4	2.4	2.3	2.4	3.0
1959	4.1	3.0	3.3	3.2	2.9	2.8	2.9	2.6	2.6	2.3	2.8	3.1	3.0
1960	3.5	3.4	3.8	3.4	2.8	3.4	2.8	3.3	2.1	1.9	2.3	3.5	3.0
1961	3.1	3.2	2.6	3.4	2.4	2.9	2.2	2.7	2.6	2.4	2.5	3.2	2.8
1962	4.1	3.6	4.3	3.7	3.0	3.2	3.3	3.1	3.0	2.2	2.7	3.0	3.3
1963	5.5	3.8	4.1	4.2	4.0	3.9	3.2	2.9	3.5	2.8	3.1	3.6	3.7
1964	3.0	3.9	3.7	5.2	3.2	3.5	3.0	3.5	3.1	2.4	3.0	2.8	3.4
1965	3.7	4.0	4.4	4.0	3.5	3.5	3.4	2.6	2.9	2.8	2.8	4.0	3.5
1966	4.2	3.7	4.2	4.0	3.3	3.6	3.3	3.1	3.5	2.7	2.8	2.9	3.4
1967	3.5	3.6	2.9	3.5	3.1	3.0	3.3	2.5	2.3	2.4	2.0	3.3	3.0
1968	3.9	4.0	3.5	2.6	3.4	3.2	2.8	2.4	2.4	2.3	7.2	2.7	3.0
1969	3.3	3.3	3.7	4.0	3.3	2.4	2.6	2.4	2.6	2.3	8.8	3.2	3.5
1970	3.5	3.8	4.2	4.1	3.6	3.2	2.3	3.1	2.5	2.1	2.7	3.3	3.2
1971	2.9	3.5	3.3	3.3	3.2	3.4	3.0	3.5	3.0	2.6	2.6	3.3	3.1
1972	2.7	3.6	3.2	3.4	4.0	3.0	3.6	2.7	2.9	2.7	3.2	2.6	3.1
1973	2.2	2.8	3.3	3.2	3.5	3.4	3.3	3.3	2.6	2.4	3.6	3.3	3.1
1974	2.2	3.1	3.6	4.3	3.4	3.1	3.7	3.6	2.6	2.6	2.7	2.6	3.1
1975	3.6	3.3	3.7	3.8	3.3	2.7	2.8	2.7	2.7	2.3	2.4	3.5	3.1
1976	4.0	2.5	3.2	2.7	2.9	3.1	2.9	2.8	2.2	2.3	2.7	2.5	2.8
Ave.	3.6	3.5	3.7	3.6	3.2	3.2	3.1	3.0	2.7	2.5	2.9	3.2	3.2

Table B 8 Continued (4)

Busan (1952-1976)													Unit: m/sec.
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	4.5	4.4	4.8	4.9	3.6	4.9	4.6	4.4	3.6	3.6	4.4	4.8	4.4
1953	5.5	4.9	4.9	4.5	4.8	4.0	4.8	5.3	3.8	4.0	4.8	4.5	4.7
1954	5.0	5.9	5.0	4.5	3.9	5.5	4.7	4.0	4.6	3.9	3.8	4.5	4.6
1955	3.5	3.5	4.0	4.2	2.8	3.7	3.8	3.6	4.2	4.5	3.5	3.9	3.8
1956	4.4	4.4	5.1	4.5	3.5	4.3	3.7	3.9	3.9	3.7	4.2	4.5	4.2
1957	4.3	4.9	4.5	4.0	3.6	3.8	4.3	4.0	4.0	3.5	3.6	4.5	4.1
1958	5.5	4.5	4.3	4.2	4.0	3.3	4.5	3.9	4.6	4.1	4.2	3.8	4.2
1959	4.4	5.0	4.8	4.2	4.4	3.9	4.8	4.9	4.6	3.2	3.7	4.7	4.4
1960	4.3	4.6	4.9	4.1	3.9	4.8	3.8	4.7	3.5	4.4	3.0	4.3	4.2
1961	4.5	3.9	4.5	5.1	3.8	3.4	4.5	4.3	4.6	5.3	4.3	5.1	4.4
1962	5.4	4.7	5.3	3.9	3.1	3.6	3.8	4.3	3.6	2.7	4.6	4.5	4.1
1963	6.0	5.3	5.5	6.1	4.7	4.9	5.4	3.8	4.7	4.0	4.2	4.9	5.0
1964	5.3	5.9	4.8	6.0	3.9	4.7	5.5	5.6	4.9	4.1	4.6	3.8	4.9
1965	4.3	4.1	5.1	4.8	4.6	4.1	6.0	3.9	3.9	3.7	3.4	4.7	4.4
1966	4.2	5.3	5.4	4.3	4.7	4.6	5.3	4.1	4.7	4.4	4.2	4.9	4.7
1967	4.8	5.3	4.5	5.2	3.9	3.9	4.2	3.9	4.5	4.3	4.7	4.5	4.3
1968	5.3	5.2	4.9	3.5	4.0	3.9	4.3	4.7	4.6	4.6	3.8	4.5	4.4
1969	4.6	5.4	4.8	5.7	4.7	4.1	5.3	4.8	4.9	4.6	4.7	4.6	4.9
1970	5.1	4.8	4.7	5.2	4.4	4.0	4.6	4.5	4.6	3.5	4.5	4.7	4.6
1971	5.0	5.1	4.9	4.5	4.3	3.3	5.0	4.5	4.5	4.2	4.1	4.7	4.5
1972	5.5	5.7	4.4	4.8	4.5	3.4	5.4	4.6	4.4	4.1	4.2	4.6	4.6
1973	4.7	4.1	4.6	4.6	3.9	3.4	3.9	5.3	3.7	4.0	5.0	4.9	4.3
1974	4.2	4.7	4.7	6.4	4.5	3.9	4.5	4.8	3.8	3.7	4.0	4.4	4.5
1975	4.6	4.7	4.7	4.8	4.1	3.0	5.1	4.0	4.2	4.4	4.5	4.6	4.4
1976	4.6	4.3	4.4	4.3	4.3	4.6	4.3	4.5	3.9	3.6	4.2	4.3	4.3
Ave.	4.8	4.8	4.8	4.7	4.1	4.0	4.6	4.4	4.3	4.0	4.2	4.5	4.4

Table B 8 Continued (5)

Gwangju (1952-1976)													Unit: m/sec.
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	2.0	2.3	2.1	2.3	1.5	1.9	1.9	2.1	1.5	1.6	1.4	1.6	1.9
1953	2.3	1.9	2.2	2.0	2.2	1.9	2.1	1.9	1.2	1.2	1.9	1.7	1.9
1954	1.7	2.2	2.3	1.7	1.9	2.1	2.0	1.8	1.4	1.4	1.2	2.2	1.8
1955	2.0	1.7	2.0	2.1	1.8	2.0	2.2	1.5	1.6	1.5	1.5	1.5	1.8
1956	1.7	2.1	2.1	1.9	1.6	1.9	2.2	1.6	1.7	1.4	1.9	2.0	1.8
1957	1.8	2.2	2.2	2.0	1.8	1.4	2.0	1.7	1.5	1.5	1.3	1.8	1.8
1958	1.9	1.8	2.0	2.1	1.8	1.7	1.9	1.4	1.3	1.2	1.0	1.0	1.6
1959	1.4	1.4	2.0	2.0	1.4	1.7	2.0	2.0	1.5	1.0	1.5	1.4	1.6
1960	2.8	2.8	2.9	2.6	2.6	2.7	2.4	2.2	1.7	1.5	1.8	2.2	2.4
1961	2.2	2.5	2.4	2.4	1.9	1.5	2.0	2.0	1.7	1.9	1.8	2.3	2.1
1962	2.5	2.8	3.2	3.3	2.5	2.4	2.6	2.6	2.5	2.1	2.6	2.4	2.6
1963	2.9	2.4	2.8	3.1	2.6	2.5	3.1	2.1	2.2	2.2	2.3	2.6	2.6
1964	2.7	3.1	3.2	3.0	2.7	2.7	3.2	2.4	2.3	1.8	2.4	2.4	2.7
1965	3.0	3.3	3.7	3.1	2.8	2.2	3.0	2.5	2.3	2.1	2.8	3.3	2.8
1966	3.0	3.2	2.4	2.9	2.9	2.6	2.9	2.6	2.2	2.2	2.9	2.6	2.7
1967	2.8	3.2	3.0	2.4	2.1	2.0	2.2	1.6	1.4	1.8	2.0	1.9	2.2
1968	2.8	2.9	3.2	2.3	2.2	2.2	2.2	1.9	1.6	1.6	1.8	1.9	2.2
1969	2.1	3.0	2.5	3.0	2.7	2.2	2.6	2.1	1.4	1.8	2.8	2.6	2.4
1970	2.9	2.9	3.6	2.3	2.3	2.0	2.2	2.4	1.7	1.7	2.4	2.6	2.4
1971	2.1	2.7	3.1	2.5	2.3	1.9	2.2	2.0	1.7	1.9	1.7	2.7	2.2
1972	2.3	3.2	2.5	2.2	2.1	1.8	2.6	2.5	2.3	2.3	2.4	2.0	2.4
1973	2.4	2.8	3.0	2.6	2.7	2.2	2.6	2.6	1.9	2.1	2.8	2.4	2.5
1974	2.0	2.8	2.4	3.1	2.4	2.1	2.4	2.4	1.7	2.2	2.0	2.4	2.3
1975	2.5	2.8	2.8	2.6	2.2	1.9	2.4	1.6	1.5	1.6	2.0	2.2	2.2
1976	2.6	2.3	2.8	2.4	2.1	2.1	2.1	2.2	2.0	2.0	2.2	2.0	2.2
Ave.	2.3	2.6	2.7	2.5	2.2	2.1	2.4	2.1	1.8	1.7	2.0	2.1	2.2

Table B 8 Continued (6)

Jeonju (1952-1976)													Unit: m/sec.
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	1.7	1.5	1.7	1.9	1.4	1.8	1.5	1.6	1.2	1.5	1.1	1.4	1.5
1953	1.8	1.4	2.0	1.9	1.9	1.7	1.4	1.6	1.1	1.1	1.5	1.3	1.6
1954	1.2	1.8	1.7	1.5	1.5	1.7	1.6	1.2	1.2	1.2	1.2	1.3	1.4
1955	1.6	1.6	1.6	1.6	1.5	1.4	1.6	1.1	1.3	1.3	1.4	1.3	1.4
1956	1.4	1.6	1.7	1.7	1.4	1.7	1.4	1.3	1.2	0.9	1.3	1.5	1.4
1957	1.1	1.4	1.5	1.1	1.2	1.2	1.4	0.9	1.0	1.2	1.6	1.2	1.2
1958	1.4	1.3	1.9	1.7	1.3	1.3	1.5	1.2	1.0	1.0	0.8	0.9	1.3
1959	1.3	0.8	1.5	1.7	1.2	1.3	1.5	1.5	1.2	0.9	0.8	0.7	1.2
1960	0.8	1.0	1.1	1.3	1.2	1.2	1.1	1.1	0.9	0.9	0.6	0.8	1.0
1961	0.9	0.9	0.9	1.3	1.1	0.8	1.0	1.0	0.7	0.8	1.1	1.2	1.0
1962	1.0	1.2	1.6	1.8	1.8	1.3	1.3	1.5	1.3	0.8	0.9	0.8	1.2
1963	1.8	1.9	1.9	2.0	1.6	1.4	1.8	1.2	1.4	1.2	1.4	1.5	1.6
1964	1.3	1.4	1.7	1.6	1.2	1.3	1.5	1.1	0.7	0.5	0.8	0.8	1.2
1965	0.9	0.9	1.7	1.5	1.6	1.3	1.4	1.3	1.0	0.8	1.1	1.8	1.3
1966	1.2	1.5	1.7	4.3	1.5	1.4	1.4	1.1	0.8	1.0	1.3	1.1	1.5
1967	1.2	1.6	1.5	1.4	1.0	0.8	1.1	0.9	0.6	0.6	0.5	0.7	1.0
1968	1.0	1.0	1.0	1.2	1.2	1.2	1.3	1.0	0.8	0.8	0.9	1.1	1.0
1969	1.0	1.3	1.3	1.9	1.4	1.3	1.4	1.4	1.0	0.9	1.3	1.5	1.3
1970	1.3	1.5	1.6	1.4	1.2	1.4	1.3	1.2	1.0	0.8	0.8	0.8	1.2
1971	0.4	0.4	0.6	1.0	1.5	1.1	1.2	1.0	0.9	0.8	0.8	1.3	0.9
1972	1.0	1.1	1.2	1.4	1.0	0.7	1.1	1.2	1.2	1.3	1.0	0.9	1.1
1973	0.9	1.1	1.4	1.2	1.3	1.2	1.3	1.6	1.1	0.9	1.1	1.3	1.2
1974	0.9	1.3	1.3	1.5	1.3	1.2	1.1	1.2	1.0	1.0	0.8	0.7	1.1
1975	1.0	1.2	1.5	1.5	1.4	1.2	1.4	1.2	1.0	0.9	1.0	0.6	1.2
1976	1.1	1.0	1.2	1.3	1.3	1.4	1.4	1.4	1.2	1.0	0.7	1.0	1.2
Ave.	1.2	1.3	1.5	1.6	1.4	1.3	1.4	1.2	1.0	1.0	1.0	1.1	1.3

Table B 9 MONTHLY SUNSHINE HOURS

Seoul (1954-1976)													Unit: hr.
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	--	--	--	--	--	--	--	--	--	--	--	--	--
1953	--	--	--	--	--	--	--	--	--	--	--	--	--
1954	153.0	144.7	234.4	237.7	225.4	155.2	132.3	176.4	152.3	210.9	149.0	155.5	2,126.8
1955	160.7	159.8	173.1	180.7	207.4	202.0	139.7	260.7	220.3	212.6	169.6	142.7	2,229.3
1956	173.1	193.6	154.3	177.2	243.2	154.2	146.1	197.4	192.3	236.0	192.0	168.5	2,227.9
1957	155.8	172.3	190.6	208.2	283.7	212.9	84.3	180.7	263.2	222.7	180.4	148.6	2,303.4
1958	146.3	181.3	204.4	204.5	261.1	242.8	163.6	152.5	157.6	203.0	131.6	131.8	2,180.5
1959	184.4	142.8	188.8	199.8	236.2	132.9	157.8	167.1	137.4	216.4	153.5	135.4	2,052.5
1960	148.7	168.0	181.7	239.8	210.4	156.3	140.1	177.3	152.6	224.6	134.3	140.8	2,074.6
1961	158.5	174.2	212.5	227.1	224.7	159.5	90.1	112.0	167.6	202.8	146.7	158.4	2,034.1
1962	188.4	180.1	191.2	192.8	299.3	202.3	166.2	110.0	141.3	202.6	128.9	130.4	2,133.5
1963	210.8	195.1	224.9	123.4	146.2	152.5	97.0	178.5	208.1	246.9	166.3	119.9	2,070.6
1964	131.2	181.9	191.9	139.9	223.3	195.6	93.7	131.3	138.2	186.3	153.7	165.1	1,932.1
1965	165.7	183.7	217.0	219.7	209.0	242.5	109.6	84.7	242.9	223.4	138.6	146.9	2,183.7
1966	183.1	136.7	164.0	211.1	253.1	195.2	90.8	192.2	160.3	185.7	174.4	166.3	2,112.9
1967	205.5	176.3	214.3	187.9	285.6	186.4	156.7	118.4	188.2	247.7	156.6	154.8	2,278.4
1968	188.3	226.4	228.4	274.1	184.2	230.1	128.9	207.8	219.6	193.8	152.8	118.1	2,352.5
1969	137.8	145.9	190.8	150.7	201.4	224.9	121.5	181.3	127.7	217.5	144.5	134.3	1,978.3
1970	172.4	161.8	243.0	236.5	232.9	140.6	75.9	122.2	117.7	197.9	169.7	110.2	1,980.8
1971	109.5	154.3	201.8	231.4	216.9	159.3	84.4	120.5	164.2	238.9	170.2	176.7	2,028.1
1972	125.1	115.6	171.3	169.7	191.2	205.8	161.3	133.4	189.9	189.7	90.2	118.2	1,861.4
1973	115.1	158.8	202.6	176.0	248.6	134.8	154.7	111.6	147.4	162.3	130.1	164.2	1,906.2
1974	205.7	133.4	188.2	188.1	217.0	215.3	65.6	133.9	191.6	175.8	136.5	123.8	1,974.9
1975	178.0	174.8	192.4	209.2	193.5	157.5	85.7	203.8	145.6	165.2	172.0	185.1	2,062.8
1976	186.7	130.6	201.8	208.0	239.5	181.5	125.4	94.7	205.3	188.3	162.1	167.2	2,091.1
Ave.	164.5	164.9	198.4	199.7	227.6	184.4	120.5	154.3	175.3	206.6	152.3	146.2	2,095.0

Table B 9 Continued (2)

<u>Chungnyeong (1953-1976)</u>													Unit: hr.
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	—	—	—	—	—	—	—	—	—	—	—	—	—
1953	—	181.0	204.0	275.4	243.9	158.1	158.5	179.4	214.9	241.5	197.9	163.7	2,218.3
1954	126.0	164.2	252.0	228.3	239.3	153.0	120.6	189.1	171.1	224.8	190.5	175.8	2,234.7
1955	193.6	195.1	158.4	217.6	263.9	212.9	184.5	249.8	204.7	228.3	202.7	200.8	2,512.3
1956	182.7	209.9	145.8	223.6	247.9	173.3	187.5	197.5	164.6	229.3	209.1	205.0	2,376.2
1957	160.1	173.4	211.2	212.9	278.9	200.9	95.8	183.3	257.4	236.8	194.7	183.5	2,388.9
1958	172.3	196.6	248.4	211.0	298.9	261.6	183.2	155.5	180.1	185.2	172.8	171.7	2,437.3
1959	194.2	146.2	228.4	223.4	273.5	225.3	214.0	195.4	137.6	267.3	170.4	175.5	2,451.2
1960	200.9	206.0	204.9	239.4	236.3	207.8	225.3	231.1	138.2	220.0	176.7	182.1	2,468.7
1961	199.2	214.5	220.8	270.3	253.1	190.8	175.9	194.5	172.6	180.0	155.5	200.7	2,427.9
1962	199.5	186.3	251.8	213.3	328.1	222.8	194.9	181.5	149.9	243.5	123.0	168.2	2,462.8
1963	177.1	207.7	233.4	126.7	177.0	148.4	155.5	208.4	202.8	251.9	172.3	139.4	2,200.6
1964	142.9	157.8	214.1	132.8	253.9	234.5	188.1	234.5	151.1	171.5	184.0	172.4	2,237.6
1965	176.8	205.7	273.3	231.6	258.0	264.3	92.1	179.5	256.2	235.7	152.6	171.4	2,497.2
1966	215.6	197.2	161.6	176.0	239.1	208.6	161.5	188.5	125.4	166.9	192.0	192.4	2,224.8
1967	209.2	183.0	219.1	192.3	282.3	210.9	160.6	203.0	190.6	252.1	134.5	164.9	2,402.5
1968	182.4	213.3	225.7	246.5	196.6	241.9	161.0	178.0	194.6	169.8	157.1	126.5	2,293.4
1969	129.7	114.6	196.7	207.9	249.4	248.9	140.5	182.5	144.3	237.8	159.0	172.5	2,183.8
1970	204.3	175.3	232.7	225.0	229.1	168.6	168.1	136.7	111.5	206.0	206.4	161.1	2,224.8
1971	158.9	155.9	215.3	259.1	262.3	176.7	167.9	154.3	181.6	237.5	212.7	179.7	2,361.9
1972	127.7	109.0	105.3	219.3	223.6	224.5	203.8	171.4	140.3	160.4	106.4	167.7	1,959.4
1973	128.1	173.8	236.6	215.2	247.1	191.0	230.3	230.8	197.7	195.2	189.0	196.4	2,431.2
1974	213.7	132.7	191.6	231.8	238.0	234.8	65.3	172.8	182.7	135.4	177.2	110.1	2,086.1
1975	147.3	146.5	173.3	186.7	199.4	136.7	115.1	219.0	150.2	160.4	149.5	191.0	1,975.1
1976	190.9	131.1	207.6	204.6	227.2	198.6	148.0	132.3	205.3	191.9	160.7	138.9	2,137.1
Ave.	175.4	174.0	208.8	215.4	247.8	204.0	162.4	189.5	176.1	209.5	172.8	171.3	2,307.0

Table B 9 Continued (3)

Daegu (1952-1976)													Unit: hr.
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	203.9	178.5	210.2	210.7	248.3	236.9	187.1	213.1	148.0	234.5	122.8	183.7	2,377.7
1953	206.0	165.7	205.9	261.0	232.9	132.1	174.5	205.3	208.6	232.3	185.7	149.4	2,359.4
1954	116.2	161.9	215.3	211.7	197.3	140.7	100.9	186.4	177.1	199.4	184.0	166.3	2,057.2
1955	196.6	178.5	131.1	200.8	222.8	159.0	151.4	240.6	179.7	211.7	200.6	205.2	2,287.0
1956	190.0	224.8	157.9	208.7	256.5	146.5	170.3	165.4	139.5	214.5	219.8	211.1	2,305.0
1957	176.3	171.6	222.9	206.9	245.1	178.4	98.0	187.2	231.2	232.7	197.6	204.2	2,352.1
1958	195.4	210.2	257.8	202.0	274.4	253.3	213.9	132.1	177.4	178.9	175.9	175.9	2,447.2
1959	197.7	128.8	230.4	226.0	251.2	215.3	207.6	168.8	135.4	273.6	175.6	184.7	2,395.1
1960	219.6	232.0	213.7	247.5	234.1	217.1	237.4	275.9	136.0	222.4	194.5	207.9	2,638.1
1961	200.3	227.5	206.5	255.7	240.0	178.5	143.0	181.5	144.1	169.5	165.8	212.4	2,324.8
1962	219.2	169.9	264.4	210.3	290.4	205.0	180.1	181.9	142.3	247.7	136.5	188.7	2,436.4
1963	192.5	195.7	200.6	109.8	149.5	136.1	170.7	177.2	217.8	246.8	190.1	165.2	2,152.0
1964	149.6	174.2	242.8	145.1	264.0	255.6	242.0	275.7	162.8	180.7	214.3	202.2	2,509.0
1965	206.8	212.2	296.2	234.6	281.5	266.2	122.2	238.6	258.3	232.7	180.3	190.0	2,719.6
1966	226.5	202.7	178.3	190.0	261.7	214.0	192.9	184.0	138.3	179.2	210.1	207.6	2,385.3
1967	212.8	187.7	228.0	188.7	279.1	233.4	164.0	243.2	197.0	242.2	139.4	174.6	2,490.1
1968	196.8	230.5	247.1	244.5	209.7	258.5	170.8	179.5	165.2	197.5	171.7	156.9	2,428.7
1969	54	41	47	50	58	54	35	53	36	68	64	64	52
1970	235.7	189.6	255.7	235.9	224.3	179.7	179.1	156.6	108.8	199.6	219.1	184.1	2,368.2
1971	199.4	184.4	215.5	237.3	249.6	177.1	189.8	162.6	177.5	204.3	225.4	217.0	2,439.9
1972	154.4	133.6	177.0	211.6	230.4	221.6	178.8	179.7	194.9	209.3	149.2	169.1	2,208.4
1973	126.6	174.0	247.9	215.3	237.9	184.4	250.5	221.0	181.7	179.6	208.8	223.0	2,450.7
1974	223.7	150.5	207.3	226.3	214.3	178.5	42.0	194.8	169.3	131.7	167.6	120.7	2,026.7
1975	180.6	152.7	174.4	191.3	207.3	167.1	155.5	227.3	150.4	146.1	154.5	222.6	2,129.8
1976	225.0	150.1	214.8	192.7	28.2	181.7	145.0	154.6	186.9	192.9	176.4	144.1	2,192.4
Ave.	188.2	177.1	209.9	204.6	223.5	190.8	164.1	191.4	166.6	201.1	177.2	181.2	2,276.0

Table B 9 Continued (4)

Busan (1952-1976)													Unit: hr.
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	181.7	157.4	186.8	192.5	224.6	187.1	162.5	219.0	142.7	188.7	153.1	191.2	2,187.3
1953	185.7	154.9	196.8	237.4	203.6	90.1	137.4	188.1	166.8	197.1	164.2	177.8	2,099.9
1954	123.7	162.6	171.3	177.2	144.1	105.7	70.0	226.7	187.6	181.4	165.6	187.9	1,903.8
1955	183.5	154.3	94.9	145.4	227.2	145.8	128.6	262.1	171.2	213.9	209.9	196.4	2,133.2
1956	201.2	210.9	141.1	192.6	194.2	118.3	150.1	175.7	128.5	182.7	223.0	194.6	2,112.9
1957	179.1	158.7	237.0	173.9	226.2	150.6	20.2	140.0	189.8	225.0	188.6	179.3	2,068.4
1958	183.2	196.1	221.3	154.5	243.4	198.6	144.0	123.3	162.6	177.3	184.9	199.4	2,188.6
1959	204.1	120.6	209.3	223.9	218.0	240.9	182.2	193.2	106.7	248.6	201.3	176.4	2,352.2
1960	209.9	228.2	171.7	227.2	196.6	150.9	200.9	249.8	103.1	195.0	173.5	206.8	2,313.6
1961	206.4	217.7	188.1	236.7	200.4	151.7	155.1	158.0	173.5	160.8	167.1	232.1	2,247.6
1962	238.3	198.0	259.5	201.9	226.7	186.4	139.4	200.4	164.6	223.6	151.5	205.9	2,396.2
1963	244.8	216.5	193.2	99.2	139.3	94.2	145.3	201.3	189.9	240.7	205.9	195.7	2,165.1
1964	134.8	146.6	216.2	80.0	266.3	255.5	213.4	284.9	151.2	163.5	208.3	197.6	2,318.3
1965	211.7	185.9	284.5	198.0	241.3	236.3	83.2	279.2	262.4	230.9	173.5	209.5	2,596.4
1966	229.6	196.3	180.5	184.9	262.8	225.7	199.6	243.7	183.6	211.0	211.7	211.6	2,541.0
1967	220.2	169.0	202.8	163.0	260.0	246.6	192.1	264.4	197.2	228.1	149.1	213.6	2,506.1
1968	192.2	205.9	223.4	238.2	199.7	239.5	156.5	172.9	160.0	177.9	202.9	155.7	2,324.8
1969	147.4	133.4	202.6	188.0	248.5	225.3	161.9	224.6	150.5	243.1	190.8	195.9	2,312.0
1970	217.2	170.5	220.3	173.3	175.5	145.9	139.1	187.7	107.2	184.3	200.1	160.0	2,081.1
1971	194.1	163.1	195.3	226.4	234.0	130.1	177.1	196.7	151.0	191.3	202.3	187.2	2,248.6
1972	132.8	135.5	171.0	184.9	197.8	165.5	159.5	159.3	138.7	199.7	147.5	161.6	1,953.8
1973	139.8	149.3	176.7	117.0	200.4	188.7	229.4	216.6	149.4	150.3	202.4	233.3	2,153.3
1974	203.5	145.9	170.7	207.3	178.4	138.7	21.3	205.6	166.1	123.9	188.9	151.3	1,901.6
1975	184.7	170.1	225.3	181.3	212.2	171.8	180.3	258.9	148.8	154.3	150.4	219.1	2,257.2
1976	228.5	139.3	199.1	203.2	212.3	187.1	158.9	175.2	190.5	206.0	185.3	183.4	2,268.8
Ave.	191.1	171.5	197.6	184.3	213.3	175.1	148.3	208.3	161.7	196.0	184.0	192.9	2,224.0

Table B 9. Continued (5)

Gwangju (1952-1976)													Unit: hr.
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	170.5	152.7	186.7	200.1	225.8	233.8	208.9	214.9	172.8	239.1	164.9	170.0	2,340.2
1953	163.6	132.4	170.9	207.4	193.4	114.1	134.7	215.2	211.0	232.6	198.6	157.9	2,131.8
1954	129.5	168.5	255.4	237.6	214.2	177.7	134.7	230.5	187.1	230.4	206.5	159.4	2,331.5
1955	181.1	164.6	142.3	191.6	249.8	187.7	181.3	211.1	196.1	232.6	182.9	198.2	2,319.3
1956	190.8	201.7	125.1	217.8	216.3	150.1	191.6	199.3	159.4	218.3	186.7	150.7	2,207.8
1957	130.8	172.2	217.4	188.3	264.4	171.9	75.8	176.0	235.2	206.5	183.2	137.1	2,158.8
1958	157.0	179.5	197.0	167.9	230.5	242.7	174.0	155.4	170.9	153.5	179.4	171.3	2,179.1
1959	132.3	121.3	215.6	208.8	211.8	183.1	179.4	248.0	133.2	270.2	185.4	140.1	2,229.2
1960	185.1	195.0	182.8	233.2	182.8	189.4	225.5	288.3	133.2	237.0	163.9	160.7	2,376.9
1961	196.8	213.6	224.5	267.9	232.4	170.3	189.7	183.2	194.4	237.4	173.3	188.6	2,472.1
1962	179.6	190.8	263.6	220.1	306.3	237.8	199.5	210.3	192.8	264.6	161.7	178.3	2,605.4
1963	178.1	218.6	239.1	121.2	145.3	127.8	147.3	227.0	210.3	254.8	173.1	156.3	2,198.9
1964	139.9	153.1	235.8	116.8	250.2	234.5	220.8	292.5	211.2	183.7	210.3	182.9	2,431.7
1965	181.5	177.3	283.6	252.0	253.4	233.8	97.0	226.4	290.9	236.5	150.6	159.1	2,542.1
1966	193.5	180.3	187.4	218.3	277.6	225.1	194.2	236.1	188.0	198.1	195.6	170.5	2,464.7
1967	177.1	171.0	197.1	177.1	268.8	221.2	166.9	256.9	239.5	261.7	126.1	140.7	2,404.1
1968	145.6	195.6	240.8	252.8	197.2	245.9	180.4	198.3	199.9	191.2	164.3	126.4	2,338.4
1969	121.1	128.2	204.2	177.0	268.2	244.9	165.8	216.2	150.5	254.9	164.7	148.8	2,244.5
1970	211.6	162.8	229.1	195.6	194.0	120.2	164.5	180.0	101.4	180.2	205.2	149.7	2,094.3
1971	159.5	129.5	188.3	240.9	239.3	141.4	171.3	180.2	167.0	216.1	190.3	163.6	2,187.4
1972	115.7	111.7	173.0	184.6	193.4	202.2	154.9	184.5	203.2	208.1	127.9	148.4	2,007.6
1973	150.1	134.6	225.4	211.6	214.8	219.9	248.9	246.9	206.5	194.4	198.7	161.7	2,413.5
1974	195.6	141.3	179.8	209.7	221.4	234.8	85.2	241.5	213.0	168.9	161.4	108.4	2,161.0
1975	116.8	144.6	202.9	173.3	203.1	171.4	137.0	219.0	129.1	135.8	151.5	157.6	1,942.1
1976	163.4	146.7	217.1	199.7	218.3	155.3	147.2	170.0	200.6	166.4	136.1	126.9	2,047.7
Ave.	162.7	163.5	207.4	202.9	226.9	193.5	167.1	216.3	187.9	214.9	173.7	156.5	2,275.0

Table B 9 Continued (6)

Jeonju (1952-1976)													Unit: hr.
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1952	165.9	116.2	175.9	210.7	249.2	241.9	200.0	199.8	175.4	230.7	134.7	136.1	2,235.6
1953	159.1	124.0	197.3	255.0	247.9	115.3	154.1	186.2	217.6	224.0	186.8	146.2	2,213.3
1954	92.6	152.1	244.4	220.6	208.3	152.9	122.1	195.4	178.2	223.1	202.6	173.4	2,165.5
1955	159.6	168.3	171.3	196.7	255.9	215.8	160.2	230.2	221.4	232.5	164.8	168.9	2,345.3
1956	178.5	183.3	127.7	204.4	234.8	164.9	167.4	223.3	146.3	214.5	183.8	162.8	2,191.5
1957	125.1	160.0	190.2	189.6	251.2	185.1	71.5	202.8	261.7	212.2	207.0	150.9	2,207.0
1958	165.7	185.9	227.4	176.1	236.5	284.7	193.5	167.4	181.5	177.3	168.3	162.9	2,327.0
1959	164.7	129.7	212.8	189.3	245.1	214.0	179.6	212.6	119.6	267.9	168.9	131.2	2,236.2
1960	175.0	183.6	179.4	235.5	210.5	160.6	199.4	241.4	141.1	218.7	149.7	164.9	2,260.0
1961	166.5	193.3	197.2	220.0	183.4	147.5	146.2	180.6	167.6	201.5	126.5	163.7	2,094.0
1962	136.9	139.7	219.0	193.2	290.9	192.3	133.7	148.9	136.0	226.4	137.6	145.7	2,100.3
1963	133.7	191.9	219.0	111.2	154.2	125.8	104.4	174.3	208.8	233.0	139.5	111.4	1,907.3
1964	123.2	155.9	212.4	128.7	244.1	220.0	160.7	250.3	165.4	168.1	169.1	158.0	2,155.9
1965	160.9	174.8	257.1	223.7	234.8	221.1	87.8	185.4	261.9	214.1	126.9	146.7	2,295.2
1966	195.7	179.2	168.7	178.4	264.3	216.6	124.5	186.1	160.1	184.2	175.5	159.8	2,192.9
1967	166.7	149.4	174.9	157.4	264.0	188.0	154.2	198.4	195.3	220.2	126.0	126.7	2,120.9
1968	132.7	162.3	203.0	227.2	168.7	232.7	128.0	152.7	180.7	142.5	151.4	104.2	1,985.7
1969	107.6	121.2	184.5	163.6	230.0	232.4	129.5	197.1	154.8	230.2	140.7	131.6	2,023.1
1970	171.4	140.0	189.4	186.5	214.3	142.7	125.0	166.4	99.7	172.1	178.5	120.7	1,914.6
1971	124.0	114.2	177.7	228.0	221.8	151.2	151.5	187.1	181.7	229.2	177.8	143.9	2,088.0
1972	103.8	83.8	161.4	194.6	182.9	191.6	132.2	175.1	193.3	213.8	101.7	131.8	1,866.0
1973	105.5	141.7	228.0	209.3	224.2	186.2	226.1	238.3	203.9	192.9	164.6	142.9	2,263.6
1974	187.8	123.0	174.6	211.8	222.6	219.5	75.0	214.1	217.4	157.2	167.1	112.5	2,082.6
1975	154.6	153.8	214.2	183.9	232.0	182.2	143.8	245.2	160.2	161.1	161.3	161.5	2,153.8
1976	170.8	134.8	197.0	216.8	241.2	173.4	123.7	143.4	212.7	184.4	132.3	117.7	2,048.2
Ave.	149.1	150.5	196.2	196.2	228.5	190.3	143.8	196.1	181.7	205.3	157.7	143.0	2,140.0

Table B 10 DAILY RAINFALL RECORD IN 1967

Seoul													Unit: mm
Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1	1.5	--	--	0.0	--	1.2	20.9	--	--	6.6	0.0	--	
2	--	0.3	--	--	--	--	17.2	0.0	40.4	--	--	0.0	
3	--	0.1	49.3	7.3	--	3.7	0.6	4.4	52.9	--	--	0.2	
4	--	0.0	2.9	0.3	--	0.2	0.0	--	1.9	--	--	0.2	
5	--	2.3	--	--	--	--	--	--	21.2	--	1.1	0.0	
6	0.0	--	0.0	--	--	--	0.1	0.8	--	5.5	--	--	
7	0.0	6.0	--	--	--	--	0.0	7.3	0.1	--	--	--	
8	--	--	--	21.4	1.4	0.0	--	--	27.0	--	5.0	--	
9	--	--	--	1.6	1.0	17.2	--	--	--	--	--	--	
10	--	--	0.0	9.3	--	0.1	--	38.0	0.2	--	--	0.0	
11	0.0	--	0.7	--	--	1.2	0.0	2.3	0.5	--	--	--	
12	0.2	--	0.5	--	--	2.0	40.1	5.0	--	13.4	1.8	0.2	
13	--	--	--	--	--	--	0.7	13.9	--	0.2	0.1	0.0	
14	--	0.0	--	--	--	--	30.0	0.4	--	--	2.3	7.2	
15	--	0.0	--	--	--	--	0.1	23.5	--	--	--	0.0	
16	0.0	0.4	--	--	--	1.0	0.2	45.9	--	--	--	--	
17	--	--	--	0.0	--	11.6	--	--	--	--	--	--	
18	--	--	0.0	--	--	0.0	--	0.8	--	--	--	--	
19	0.0	--	--	--	--	13.7	5.9	2.9	--	--	3.9	0.4	
20	--	--	--	16.0	--	35.9	96.2	--	--	--	5.9	0.0	
21	--	0.4	0.0	0.0	--	--	22.9	--	4.6	0.8	--	--	
22	--	45.1	5.3	--	--	--	4.9	0.0	1.5	--	--	--	
23	--	--	--	--	0.8	--	25.0	17.2	7.8	--	--	--	
24	--	--	--	0.0	--	--	--	--	--	--	--	--	
25	--	--	--	--	54.4	8.0	--	86.2	--	--	--	1.4	
26	--	--	24.6	--	2.0	--	--	--	--	--	--	0.0	
27	4.9	--	1.7	11.4	0.0	7.8	17.9	0.1	--	--	22.0	--	
28	15.3	--	--	--	--	31.7	0.5	5.5	--	--	9.7	--	
29	2.8	--	--	--	--	--	0.6	7.0	--	0.0	0.8	--	
30	--	--	3.2	26.0	--	0.0	--	--	--	0.0	0.7	--	
31	--	--	0.0	--	0.0	--	--	0.0	--	--	--	0.0	
Total	24.7	54.6	88.2	93.3	59.6	135.3	283.8	261.9	158.1	26.5	53.5	9.6	

Table B 10 Continued (2)

Chupungryeong												Unit: mm
Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.4	—	—	—	—	—	—	—	—	—	1.3	—
2	—	—	—	0.4	—	—	28.3	—	—	—	0.0	—
3	—	—	0.4	1.3	—	—	32.2	—	35.6	—	—	—
4	0.0	—	15.9	2.3	—	—	8.9	—	5.2	—	1.8	—
5	—	0.0	—	—	—	0.0	0.3	—	14.3	—	9.6	0.0
6	—	—	—	—	1.4	—	15.0	0.4	2.7	2.0	—	—
7	0.0	0.1	0.0	—	—	—	16.8	0.0	0.0	—	—	0.7
8	—	2.0	—	14.3	1.3	—	—	0.0	31.1	—	4.0	0.5
9	—	0.6	—	—	0.9	4.1	—	—	0.0	—	—	—
10	—	—	—	8.9	—	2.1	—	—	16.5	—	—	0.1
11	0.9	—	—	0.0	—	—	—	7.6	25.3	—	0.7	—
12	0.0	—	—	—	—	—	—	—	—	19.2	2.7	—
13	—	—	—	—	—	—	24.1	—	—	1.0	—	—
14	—	—	—	—	—	—	—	7.5	—	—	1.3	2.0
15	—	0.4	0.4	1.5	—	—	5.5	41.7	—	—	—	0.0
16	—	1.5	—	0.6	—	0.2	3.4	0.6	—	—	—	—
17	0.2	0.0	11.6	—	—	16.0	—	18.0	0.0	—	—	—
18	—	—	3.4	1.4	—	9.8	—	—	—	—	—	—
19	—	—	—	32.9	—	19.0	—	—	—	—	16.6	—
20	—	—	—	—	—	0.6	—	—	0.3	—	5.7	1.2
21	—	0.0	3.4	—	—	0.0	25.4	—	—	—	—	0.0
22	—	6.2	7.3	—	0.0	0.0	7.9	—	0.0	—	—	0.4
23	—	—	1.3	—	0.5	—	0.0	—	0.2	—	—	—
24	—	0.2	—	—	0.0	0.5	—	0.0	—	—	—	—
25	—	—	—	—	2.6	22.3	—	1.4	—	—	—	—
26	—	—	5.1	—	5.6	—	—	—	—	2.4	—	0.0
27	8.7	0.0	2.8	13.0	—	21.2	—	—	—	—	24.4	—
28	5.8	—	—	—	—	50.4	—	—	—	—	17.5	0.0
29	1.9	—	—	—	—	0.0	—	38.2	—	—	0.5	0.0
30	0.0	—	13.8	1.2	—	—	—	32.8	—	—	1.1	—
31	—	—	0.0	—	—	—	—	1.1	—	—	—	1.7
Total	22.9	11.0	65.4	77.8	12.3	146.2	167.8	149.3	131.2	24.6	87.2	6.6

Table B 10 Continued (3)

Daegu		Unit: mm											
Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1	3.4	--	--	--	--	--	4.4	--	--	0.2	2.8	--	
2	--	--	--	0.0	--	--	27.3	--	0.3	--	0.6	--	
3	--	--	--	--	--	20.8	0.6	--	20.4	--	--	--	
4	--	--	25.3	--	--	0.7	0.1	--	1.4	--	1.8	--	
5	--	--	--	--	--	--	31.6	0.0	0.2	--	11.8	--	
6	--	--	--	--	3.0	--	19.1	3.8	3.6	17.3	--	--	
7	--	--	--	--	--	--	--	5.5	2.7	8.9	--	0.0	
8	--	5.2	--	25.4	1.4	--	--	--	71.0	--	7.6	--	
9	--	3.9	--	0.1	6.1	1.9	--	--	--	--	--	--	
10	--	0.2	--	8.6	--	2.1	--	21.1	10.7	--	--	0.0	
11	0.0	--	--	0.0	--	--	0.0	--	33.9	--	3.5	--	
12	--	--	--	--	--	--	16.0	--	0.0	14.7	0.4	--	
13	--	--	--	--	--	--	0.1	0.0	--	0.3	--	--	
14	--	--	--	--	--	--	4.7	9.0	--	--	0.0	0.0	
15	--	--	0.2	1.0	--	--	1.9	48.5	0.4	--	--	--	
16	--	--	--	0.6	--	12.7	0.0	4.6	0.0	--	--	--	
17	--	0.6	13.0	--	--	15.8	--	7.4	0.3	--	--	--	
18	--	--	2.0	1.7	--	5.0	--	--	--	--	--	0.9	
19	--	--	--	32.9	--	4.9	--	--	--	--	14.2	--	
20	--	--	--	--	--	0.0	--	0.0	--	--	4.2	1.4	
21	--	3.4	1.9	--	--	0.0	--	--	1.0	--	--	--	
22	--	4.5	0.0	--	--	32.0	--	--	--	--	--	0.0	
23	--	--	0.0	0.4	0.0	--	--	--	0.6	--	--	--	
24	--	4.8	--	--	--	0.2	--	1.6	0.3	--	--	--	
25	--	--	--	--	--	48.1	--	0.0	--	--	--	--	
26	--	--	6.7	--	23.3	--	0.0	--	--	0.0	--	--	
27	7.8	--	1.3	28.3	--	21.0	--	--	--	--	17.2	--	
28	14.1	--	--	--	--	21.3	--	--	--	--	0.8	--	
29	1.3	--	--	--	--	0.0	0.0	9.7	--	--	2.7	--	
30	0.4	--	7.3	0.3	--	0.3	--	8.3	--	--	0.3	--	
31	--	--	--	--	--	--	--	0.2	--	--	--	0.0	
Total	27.0	22.6	57.7	99.3	33.8	186.8	105.8	119.7	146.8	41.4	68.0	2.3	

Table B 10 Continued (4)

Busan												Unit: mm
Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.9	--	--	--	--	--	9.3	--	--	0.9	0.5	--
2	--	--	--	3.0	--	--	71.5	--	--	--	8.0	--
3	--	0.0	--	--	--	--	12.7	--	50.9	--	--	--
4	--	--	16.8	0.4	--	0.0	--	--	32.2	--	1.7	--
5	--	--	0.1	--	--	--	66.6	--	0.1	--	7.8	--
6	0.0	--	--	--	13.4	--	10.5	--	0.7	2.8	--	--
7	--	0.7	--	--	--	--	--	0.0	--	--	--	0.0
8	--	7.3	--	34.9	0.3	--	0.4	1.5	0.0	--	0.4	0.0
9	--	1.0	--	--	6.5	0.3	12.3	1.2	19.9	--	--	--
10	--	0.4	0.0	12.6	--	0.3	--	20.7	2.6	--	--	--
11	0.0	0.0	--	0.1	--	--	0.7	--	2.5	--	2.0	--
12	--	--	0.0	--	--	--	14.9	--	--	21.2	1.5	--
13	--	--	--	--	--	--	5.8	--	--	3.5	--	--
14	--	--	--	--	--	--	2.2	1.7	--	--	--	0.2
15	--	--	2.8	7.9	--	--	2.7	--	--	--	--	--
16	--	--	0.0	0.0	--	--	0.4	--	--	--	--	--
17	--	0.0	24.6	--	--	--	0.0	17.0	0.0	--	--	--
18	--	--	3.4	12.7	--	--	--	--	--	--	--	5.8
19	--	--	--	53.8	--	0.5	0.0	--	--	--	26.7	--
20	--	--	--	--	--	--	--	--	--	--	8.5	--
21	--	2.7	0.6	--	--	--	0.0	--	--	--	--	--
22	--	25.8	0.0	--	--	--	--	--	0.0	--	--	--
23	--	0.0	--	0.0	--	--	--	--	0.4	--	--	--
24	--	2.6	--	--	--	7.0	--	0.2	1.2	--	0.0	--
25	--	0.0	29.9	--	--	90.4	--	--	0.0	--	--	--
26	--	--	1.1	--	37.8	--	0.0	--	--	--	--	--
27	5.5	--	--	15.8	--	30.6	--	--	--	0.0	8.6	--
28	20.2	--	--	0.6	--	56.1	--	--	--	--	9.7	--
29	1.1	--	12.9	--	--	0.3	--	5.4	--	--	3.7	--
30	0.0	--	--	2.0	--	0.0	--	4.9	--	--	1.6	--
31	--	--	--	--	--	--	--	--	--	--	--	--
Total	28.7	40.5	92.2	143.8	58.0	185.5	210.0	52.4	110.0	28.4	80.7	6.0

Table B 10 Continued (5)

Gurye		Unit: mm										
Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	--	--	--	--	--	--	54.6	--	--	--	10.3	--
2	--	--	--	--	--	--	1.2	--	--	--	--	--
3	--	--	45.8	2.0	--	6.8	2.2	--	20.6	--	--	--
4	--	--	1.8	--	--	--	46.2	--	--	--	10.5	--
5	--	4.8	--	--	2.0	--	1.0	--	2.0	--	3.2	--
6	--	--	--	--	1.9	--	--	--	--	--	--	0.1
7	--	2.9	--	7.8	--	--	--	32.5	--	--	--	--
8	--	3.5	--	24.5	8.0	--	--	--	--	--	7.2	--
9	--	1.8	--	0.1	--	3.0	--	--	3.3	--	--	--
10	--	--	--	10.1	--	--	--	--	7.9	--	--	--
11	--	--	--	--	--	--	2.7	--	--	0.3	12.2	--
12	--	--	--	--	--	--	--	--	--	6.3	--	--
13	--	--	--	--	--	--	2.4	4.0	--	--	--	--
14	--	--	0.3	1.0	--	--	39.5	--	--	--	0.8	1.2
15	--	--	--	1.5	--	--	1.2	3.7	--	--	--	--
16	--	1.4	0.2	--	--	--	2.8	--	0.7	--	--	--
17	--	--	21.0	--	--	28.3	--	--	6.0	--	--	--
18	--	--	--	26.4	--	--	--	--	--	--	--	--
19	--	--	--	6.0	--	62.0	--	--	--	--	38.4	--
20	--	0.8	4.0	--	--	--	--	--	--	--	--	0.1
21	--	3.8	1.6	--	--	--	--	--	0.8	--	--	--
22	--	20.2	0.3	--	3.3	41.8	--	--	--	--	--	--
23	--	--	0.4	--	0.5	--	--	--	--	--	--	--
24	--	1.2	--	--	--	70.1	--	21.2	--	--	--	--
25	--	--	0.8	--	25.5	--	--	27.1	--	--	2.1	--
26	--	--	18.9	41.8	--	21.5	24.3	--	--	--	0.4	--
27	22.3	--	--	2.0	--	63.2	9.3	--	--	--	23.3	0.1
28	1.4	--	--	--	--	--	--	--	--	--	--	--
29	--	--	8.0	0.2	--	3.6	--	2.1	--	--	--	--
30	--	--	4.1	--	--	3.8	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--
Total	23.7	40.4	107.3	123.4	41.2	304.1	187.4	90.6	41.3	6.6	108.4	1.5

Table B 11 DAILY RAINFALL RECORD IN 1968

Seoul Unit: mm

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	—	—	—	—	—	0.7	0.0	0.0	—	—	—	—
2	0.5	0.0	—	—	12.7	2.2	0.2	—	—	—	—	0.0
3	0.0	0.0	—	—	0.0	—	46.5	—	—	—	—	—
4	0.0	—	—	2.3	—	—	91.9	—	0.0	—	0.0	0.0
5	—	—	12.9	0.3	—	—	0.0	—	100.0	—	2.8	—
6	—	—	—	—	—	—	0.0	20.2	0.1	0.5	0.5	—
7	—	—	5.6	0.0	—	—	16.0	2.7	0.1	33.9	—	—
8	—	—	—	36.0	—	0.0	10.1	59.2	—	—	3.5	—
9	—	—	—	2.7	—	26.4	—	—	—	1.1	0.3	—
10	—	0.0	—	—	—	7.8	—	0.0	—	—	0.0	1.2
11	—	—	—	—	—	—	8.0	—	—	—	—	0.0
12	0.7	—	0.0	—	4.0	0.0	—	—	10.1	—	—	0.0
13	8.1	—	—	—	—	0.0	—	0.0	—	—	1.2	0.1
14	1.8	—	—	—	—	—	4.1	12.5	—	—	—	1.1
15	—	—	6.0	0.0	—	0.0	27.2	33.7	—	—	2.8	—
16	0.0	—	—	—	—	0.0	43.0	12.5	—	6.7	2.2	—
17	—	—	—	—	0.4	0.0	44.1	1.0	—	16.5	—	—
18	—	1.3	—	—	20.4	—	21.2	0.0	—	—	0.4	—
19	—	—	—	—	—	—	51.9	0.7	2.0	0.0	2.5	—
20	—	0.0	0.0	—	—	3.6	42.7	47.2	12.8	—	—	5.4
21	—	0.3	0.8	—	—	—	0.3	—	—	—	—	—
22	—	0.9	—	—	—	—	—	23.8	—	—	—	1.9
23	0.0	0.0	—	—	—	—	0.0	149.2	1.2	—	—	1.4
24	0.2	—	—	—	—	—	—	—	—	35.1	—	—
25	—	—	—	3.9	4.5	—	—	—	—	7.6	0.0	0.0
26	—	—	—	—	0.4	—	—	0.0	—	—	27.0	—
27	—	—	—	—	11.0	—	5.2	—	—	—	10.4	—
28	—	8.0	—	—	—	0.2	—	—	—	0.4	0.0	—
29	0.0	2.0	3.8	—	0.0	0.2	—	—	—	—	0.0	—
30	—	—	—	—	0.0	—	—	—	—	—	0.6	—
31	—	—	—	—	—	—	—	0.0	—	—	—	—
Total	11.3	12.5	29.1	45.2	53.4	41.1	412.4	362.8	126.3	101.8	54.2	11.1

Table B 11 Continued (2)

Chupungryeong												Unit: mm
Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	--	--	0.0	--	--	9.4	--	31.7	--	--	--	--
2	2.0	0.0	--	--	10.1	--	2.2	1.0	--	--	--	0.3
3	0.0	0.0	--	--	1.1	--	10.7	--	--	15.3	--	--
4	--	0.3	--	--	--	--	8.5	--	0.2	--	3.9	--
5	--	--	6.8	0.4	--	--	1.0	6.2	19.4	--	11.7	--
6	--	--	--	--	0.0	--	--	5.8	--	0.1	1.4	--
7	0.0	0.0	5.6	0.0	--	--	--	2.0	0.0	54.3	--	--
8	0.4	0.3	--	6.3	--	--	--	27.6	--	--	0.4	--
9	--	--	--	1.1	--	38.3	--	3.9	--	4.5	9.4	0.0
10	--	0.4	--	0.4	--	1.9	0.0	--	--	0.0	0.5	--
11	--	0.0	0.7	--	2.1	--	--	--	0.6	0.0	0.1	0.0
12	--	--	--	--	1.0	--	--	--	12.3	--	--	0.3
13	3.3	--	--	--	0.0	--	--	--	--	--	--	0.0
14	1.4	--	--	--	--	--	64.5	1.3	--	--	--	4.0
15	--	--	--	--	--	--	56.7	41.7	--	--	--	0.0
16	--	--	3.2	0.2	--	--	58.5	31.7	--	--	0.6	--
17	--	--	--	30.1	10.5	--	--	--	--	0.0	--	--
18	--	0.8	--	1.8	15.2	--	3.3	--	--	--	--	0.0
19	--	1.6	0.7	--	--	--	--	0.7	--	--	--	--
20	0.0	0.2	14.1	--	--	0.1	--	6.4	16.0	--	9.9	2.0
21	0.0	1.0	--	--	--	--	--	--	--	--	--	--
22	0.0	0.7	--	--	--	2.9	--	2.6	--	--	--	0.8
23	--	2.5	--	--	--	--	--	19.9	--	--	0.5	0.8
24	0.4	--	--	--	--	--	--	--	--	7.2	1.5	--
25	--	--	--	0.6	--	--	--	--	--	18.8	--	--
26	--	--	--	--	4.7	--	--	0.0	--	--	--	--
27	--	--	--	--	4.6	--	--	--	--	--	8.1	--
28	--	2.2	--	--	--	--	--	--	0.0	0.9	--	--
29	--	2.3	6.3	--	--	--	3.6	--	--	--	--	--
30	--	--	9.5	--	--	--	1.7	--	--	--	--	--
31	--	--	--	--	--	--	15.3	--	--	--	--	0.0
Total	7.5	12.3	46.9	40.9	49.3	52.6	226.0	182.5	48.3	101.1	48.0	8.2

Table B 11 Continued (3)

Daegu												Unit: mm
Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	--	--	--	--	--	17.5	--	18.1	0.0	--	--	--
2	--	--	--	--	2.0	0.5	10.0	1.8	--	--	--	--
3	--	--	--	--	12.7	--	1.4	--	--	28.8	--	--
4	--	0.0	--	--	--	--	1.4	--	--	--	6.0	--
5	--	--	3.6	--	--	--	2.6	--	15.8	--	10.5	--
6	--	--	--	--	--	--	0.9	3.8	0.2	0.0	0.5	--
7	--	--	1.5	0.0	--	--	1.4	7.8	0.0	22.0	--	--
8	--	--	--	8.0	--	--	0.0	16.8	--	--	--	--
9	--	--	--	3.7	--	20.4	--	0.4	--	4.7	0.0	0.4
10	--	--	--	3.9	--	0.4	4.4	--	0.0	0.0	--	--
11	--	0.0	4.5	--	0.7	--	--	--	--	--	--	--
12	--	--	--	--	0.0	--	--	--	21.9	--	--	0.5
13	1.7	--	--	--	--	--	--	--	1.4	--	--	--
14	1.2	--	--	--	--	0.0	16.0	--	--	--	--	2.4
15	--	0.0	--	0.0	--	--	61.4	26.0	--	--	--	--
16	--	--	--	4.5	--	--	47.4	170.0	--	--	--	--
17	--	--	--	13.1	10.6	0.0	--	--	--	--	--	--
18	--	0.0	--	2.9	6.1	--	0.4	--	--	--	--	1.1
19	--	0.0	0.0	--	--	--	--	--	--	--	--	--
20	--	--	16.5	--	--	--	--	13.4	9.0	--	0.5	0.0
21	--	--	--	--	--	--	--	--	--	--	--	--
22	--	0.5	--	--	--	3.4	--	1.2	--	--	0.3	0.4
23	--	0.5	--	--	--	--	--	28.2	--	--	--	0.0
24	--	--	--	--	--	--	--	0.7	--	7.6	1.4	--
25	--	--	0.4	0.0	0.0	--	--	--	0.2	11.3	--	--
26	--	--	--	0.6	0.0	--	--	0.0	--	--	--	0.8
27	--	--	0.0	--	0.0	--	0.0	--	1.8	--	2.5	--
28	--	0.0	--	--	--	--	0.0	--	--	--	--	--
29	--	5.0	0.8	--	--	--	20.1	--	--	--	--	--
30	--	--	23.9	--	--	--	20.4	--	--	--	--	--
31	--	--	--	--	--	--	3.4	--	--	--	--	--
Total	2.9	6.0	51.2	36.7	32.1	42.2	191.2	288.2	50.3	74.4	21.7	5.6

Table B 11 Continued (4)

Busan												Unit: mm
Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	—	—	—	—	—	2.3	0.0	16.2	—	—	—	—
2	—	—	—	—	3.6	1.7	10.1	21.8	—	—	—	0.0
3	—	0.0	—	—	3.2	—	2.6	0.3	0.7	61.8	—	—
4	—	—	—	—	—	—	1.4	0.0	0.0	0.2	0.4	6.5
5	—	—	2.6	0.0	—	—	8.9	0.1	1.4	—	7.4	—
6	3.7	—	—	—	0.2	—	0.0	3.0	12.2	10.4	—	—
7	—	—	3.2	0.0	0.9	—	—	10.9	—	13.9	—	—
8	—	—	0.6	3.5	—	—	—	21.5	—	—	—	0.0
9	—	—	—	17.1	—	12.3	—	31.6	—	0.7	0.0	6.8
10	—	—	—	6.0	—	1.3	—	—	—	—	—	—
11	—	—	19.7	—	19.6	—	—	—	0.8	—	—	—
12	—	—	—	—	18.7	—	—	—	26.4	—	—	6.7
13	2.2	—	—	—	—	—	—	—	13.8	—	—	0.0
14	0.0	—	—	—	—	0.6	13.4	—	—	—	—	7.2
15	—	1.7	—	0.0	—	0.1	7.9	2.0	—	—	—	—
16	—	—	0.6	4.0	—	—	63.9	111.8	—	—	—	—
17	—	—	—	10.2	6.0	—	1.8	—	—	—	—	—
18	—	—	—	2.6	74.6	—	3.1	—	—	—	—	3.6
19	—	0.0	—	—	—	—	0.6	1.5	0.0	—	—	—
20	—	0.0	28.7	—	—	—	—	39.6	18.6	—	15.0	—
21	—	—	0.0	—	—	—	—	42.5	—	—	—	—
22	—	—	—	—	—	—	—	5.9	—	—	—	0.0
23	—	0.0	—	—	—	—	—	31.6	—	—	—	—
24	—	—	—	—	—	—	—	6.3	0.2	17.5	13.6	—
25	—	—	0.3	—	8.4	—	—	—	13.8	0.0	—	—
26	—	—	0.0	7.9	0.2	—	—	—	—	—	—	9.8
27	—	—	—	—	0.0	—	3.7	—	—	—	10.8	—
28	—	—	—	—	—	—	0.0	1.0	—	0.0	—	—
29	1.8	12.7	4.0	—	—	—	51.0	—	4.4	—	—	—
30	—	—	19.3	—	—	—	0.0	—	2.4	—	—	—
31	—	—	—	—	—	—	52.7	—	—	—	—	—
Total	7.7	14.4	79.0	51.3	135.4	18.3	221.1	347.6	94.7	104.5	47.2	40.6

Table B 11 Continued (5)

<u>Gurye</u>	Unit: mm											
Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-	-	-	-	-	2.8	9.2	50.5	-	-	-	-
2	-	-	-	-	11.2	-	1.5	-	-	8.9	-	2.0
3	-	-	-	-	26.9	-	-	-	-	3.6	-	-
4	-	-	6.5	-	-	-	1.4	-	-	-	6.1	0.6
5	-	-	-	-	-	-	3.3	1.6	46.9	8.4	3.0	-
6	-	-	2.3	-	1.7	-	-	20.9	-	28.3	-	1.6
7	-	-	6.1	0.9	-	-	-	14.7	-	36.5	-	-
8	-	-	-	12.6	-	-	-	17.7	-	-	4.5	-
9	-	-	-	-	-	77.2	-	-	-	7.6	2.6	-
10	-	-	-	1.9	0.4	-	-	0.9	-	-	1.3	-
11	-	-	9.8	-	-	-	1.4	-	-	-	-	4.2
12	4.8	-	-	-	0.9	-	-	-	17.9	-	-	0.4
13	-	-	-	-	-	-	1.2	-	-	-	-	2.5
14	-	-	-	-	-	-	12.3	-	-	-	-	0.6
15	-	-	-	4.5	-	-	11.1	209.1	-	-	-	0.5
16	-	-	-	12.1	-	-	-	25.6	-	-	-	-
17	-	-	-	11.1	11.2	-	0.3	-	-	-	-	-
18	-	-	-	0.3	4.8	-	-	1.3	-	-	-	4.0
19	-	-	12.7	-	-	-	-	-	25.6	-	-	-
20	-	-	-	-	-	4.3	-	19.9	-	-	8.4	2.4
21	-	-	-	-	-	10.4	-	-	-	-	-	0.2
22	-	-	-	-	-	10.3	-	2.4	-	-	-	0.0
23	-	-	-	-	-	-	-	32.7	-	15.2	12.1	0.0
24	-	-	-	-	-	-	-	-	-	19.6	-	-
25	-	-	0.4	1.7	1.1	-	-	-	-	0.4	-	8.1
26	-	-	-	-	-	-	-	-	-	-	7.9	-
27	-	-	-	-	7.2	-	1.1	-	-	1.1	-	-
28	-	6.5	-	-	-	-	-	-	-	-	-	-
29	-	-	38.5	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	0.0
Total	4.8	6.5	76.3	45.1	65.4	105.0	42.8	397.3	90.4	129.6	45.9	27.1

Table B 12 Continued (3)

Seomjin River (1962-1976)

Stations	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	Mean
Hadong	-	-	1,551	1,584	1,784	1,293	1,376	2,130	2,273	1,194	2,195	1,439	1,930	-	1,111	1,655
Gurye	-	1,520	1,205	1,386	1,439	1,101	1,170	1,785	1,614	1,107	1,957	1,175	1,599	1,352	1,028	1,388
Seogso	-	1,584	1,370	1,540	1,541	894	1,165	1,734	1,097	1,108	1,634	1,095	1,479	1,451	956	1,332
Dongbog	1,418	-	1,280	926	1,249	936	1,029	1,671	1,404	1,261	1,773	1,292	-	-	1,084	1,277
Bognae	1,732	1,688	1,057	1,449	1,280	922	815	1,560	1,643	1,228	2,022	1,258	1,815	1,249	1,046	1,384
Boseong	-	-	1,223	1,245	1,617	1,007	1,195	1,878	1,518	1,585	2,033	1,492	-	1,429	1,180	1,450
Naeweon	-	-	1,335	1,460	1,454	1,137	997	2,017	1,300	1,342	1,635	1,145	1,456	1,533	1,144	1,381
Banam	-	1,520	1,533	1,482	1,181	964	884	1,984	1,239	961	1,267	1,136	-	1,500	-	1,304
Sunchang	-	1,707	1,326	1,337	1,415	914	926	1,831	1,378	1,401	1,800	1,406	1,714	1,772	1,233	1,440
Gangjin	-	1,789	1,492	1,130	1,384	979	906	1,559	1,548	1,265	1,711	1,536	1,534	1,571	1,019	1,387
Ssangchi	-	1,755	1,704	1,322	1,585	985	1,313	1,814	1,287	1,398	1,760	1,427	1,758	1,480	1,309	1,493
Seongsu	-	-	1,557	1,384	1,332	1,012	1,063	1,836	1,469	1,175	1,602	1,192	-	1,380	1,042	1,337
Jangheung	-	1,818	1,182	1,238	1,279	917	1,068	1,467	1,720	1,669	1,526	1,536	2,009	1,250	1,082	1,412
Mean	1,575	1,673	1,370	1,345	1,426	1,005	1,070	1,790	1,499	1,284	1,763	1,318	1,699	1,452	1,103	1,403

Unit: mm

Table B 13 MEAN MONTHLY PRECIPITATION

Han River (1962-1976)												Unit : mm	
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Seoul	21.8	29.8	38.2	100.8	85.0	111.5	398.7	459.7	175.3	49.8	38.9	13.5	1,360.8
Olmpo	24.8	31.4	38.5	81.4	101.5	83.1	400.5	270.3	139.4	47.2	40.4	18.3	1,304.0
Namyangju	23.8	31.7	41.8	110.9	88.8	101.2	354.8	304.3	148.9	58.0	47.6	10.4	1,338.1
Euljeongbu	27.0	29.5	39.8	117.1	92.7	117.8	489.9	333.1	177.0	48.9	38.7	14.0	1,493.0
Nageong	16.8	17.8	21.4	118.9	55.9	86.0	425.6	295.3	138.6	37.7	21.1	8.0	1,237.1
Naeri	12.2	11.0	25.3	101.4	79.8	85.0	549.9	238.1	133.3	50.2	31.8	5.8	1,326.8
Geumgog	19.6	24.0	47.1	85.7	128.0	80.0	339.3	253.8	142.7	76.5	39.8	17.4	1,245.8
Goon	18.2	18.1	40.6	67.5	76.6	102.0	415.9	285.8	111.4	40.0	25.0	9.9	1,224.8
Nambansan	28.0	33.2	23.1	76.5	83.9	104.9	355.5	412.1	152.3	50.5	38.8	17.6	1,369.3
Gwanju	24.8	38.8	42.3	109.9	84.1	114.1	391.5	317.7	184.0	56.1	39.8	16.0	1,399.2
Mohyeon	48.6	41.3	44.5	82.4	104.2	81.1	323.0	323.2	148.6	59.7	69.3	35.8	1,362.9
Pogog	20.1	28.3	35.0	91.1	128.8	85.1	353.4	334.4	152.5	73.0	44.0	17.2	1,373.9
Yongja	27.0	32.9	44.0	116.8	82.0	87.5	353.8	283.0	133.8	52.3	46.1	14.3	1,284.4
Unhag	25.2	12.3	35.2	102.5	98.6	84.5	317.5	345.9	158.6	55.4	37.3	15.7	1,388.7
Yangji	93.4	48.7	30.8	81.1	68.5	78.3	310.5	413.6	156.8	63.1	58.5	11.1	1,394.5
Yanggyeong	70.9	48.7	49.7	108.9	100.9	105.6	455.0	358.8	162.4	50.7	33.1	11.2	1,555.9
Cheongun	17.9	27.6	61.7	119.7	85.7	117.4	671.0	283.4	162.3	58.1	51.5	17.0	1,583.3
Yangdong	27.5	25.4	49.2	117.3	87.4	118.0	442.1	265.0	174.3	50.2	38.3	13.6	1,409.3
Icheon	23.6	33.0	45.3	114.7	95.3	115.2	343.0	281.4	160.5	53.0	44.5	15.4	1,325.8
Yeosu	27.8	35.8	46.0	111.2	85.1	109.8	381.2	286.8	138.2	52.3	40.8	12.8	1,319.8
Seonggye	45.4	25.2	48.8	78.2	75.5	77.5	306.9	277.1	129.4	41.9	27.5	10.6	1,143.1
Weonsan	36.1	42.7	48.1	132.1	84.2	114.8	359.0	326.9	148.2	54.5	60.9	23.4	1,440.9
Ganhyeon	27.5	33.0	34.8	80.6	101.9	95.3	287.6	323.4	143.2	56.5	39.1	18.3	1,232.2
Weosu	21.8	29.2	40.0	98.6	74.0	85.4	389.3	288.9	118.4	32.4	28.3	12.0	1,217.3
Hoangseong	29.0	31.3	40.8	119.9	91.8	106.5	409.1	295.3	138.3	49.1	39.1	16.8	1,367.0
Cheongli	14.0	10.9	31.7	127.5	114.3	121.9	489.1	351.5	174.4	49.0	32.9	9.0	1,525.6
Buroo	30.9	24.5	49.1	111.0	96.7	105.6	326.3	221.8	143.9	33.8	24.1	15.6	1,183.3
Mogyo	19.7	20.1	55.4	111.8	87.0	91.3	293.3	239.3	133.0	38.9	35.3	21.2	1,150.3
Chungju	26.4	32.5	50.3	89.0	80.4	93.1	250.8	220.8	136.1	38.5	34.8	12.0	1,064.8
Goesan	28.7	35.4	50.8	80.8	83.5	97.0	256.7	248.3	125.6	51.2	50.3	19.1	1,127.4
Sangno	7.0	18.9	45.0	78.4	76.3	104.1	289.2	199.0	107.4	38.8	35.0	6.1	1,003.2
Yeongpung	33.8	44.0	69.6	102.8	77.4	101.8	281.2	284.6	140.2	48.3	54.1	22.7	1,240.7
Cheongcheon	23.6	33.5	46.0	104.1	84.6	115.8	268.7	205.9	150.0	44.4	39.5	25.6	1,141.7
Baegu	28.6	40.0	55.5	117.5	101.2	109.7	338.4	313.2	152.0	47.3	49.5	21.9	1,374.6
Cheongpung	15.1	24.1	40.5	88.2	73.5	89.4	300.9	184.1	133.2	28.6	29.6	10.8	1,027.9
Danyang	17.6	22.4	38.8	87.1	61.3	103.3	223.5	214.3	141.8	37.2	39.5	22.5	994.3
Yeongchum	26.2	29.4	43.6	83.0	82.5	101.6	244.7	189.9	153.6	40.2	49.9	18.3	1,058.9
Sangdong	24.6	24.9	53.5	93.1	87.8	108.4	261.0	225.0	153.5	40.6	38.7	14.4	1,126.3
Yeongweol	35.0	27.7	38.6	85.8	77.8	90.0	264.6	206.8	143.3	33.5	33.5	11.6	1,058.2
Suju	19.5	24.0	48.7	105.8	78.1	105.6	316.2	260.0	154.2	46.7	39.2	30.4	1,228.4
Pyeongchang	21.9	38.4	47.2	117.4	82.2	108.9	349.0	245.5	178.4	55.4	39.5	14.3	1,300.1
Bangrim	20.4	37.6	49.7	88.5	83.6	104.7	292.3	291.8	176.8	51.9	62.1	14.1	1,253.5
Dahwa	16.5	22.2	34.7	77.6	70.5	109.2	294.7	255.7	137.5	47.1	28.8	15.6	1,108.1
Bonggyeong	50.9	40.1	49.0	106.6	101.0	126.8	345.8	252.0	147.2	36.7	31.9	22.7	1,301.2
Jeongseo	27.4	29.9	52.7	100.2	89.2	101.3	317.4	244.6	146.5	40.8	39.4	16.8	1,206.2
Jinbu	29.8	30.8	46.0	90.2	59.7	106.1	321.3	203.1	139.5	43.6	32.9	10.4	1,112.4
Imgye	36.6	37.3	54.3	91.8	75.6	92.1	284.6	239.4	160.0	41.4	45.2	22.0	1,160.3
Hanyeon	23.1	23.0	47.8	107.7	93.0	93.7	497.4	396.8	196.7	59.7	46.3	14.6	1,599.8
Seomyeon	26.6	22.2	7.7	129.3	93.9	88.6	243.3	172.9	97.3	7.4	18.9	13.5	921.6
Hongcheon	29.7	39.0	60.4	85.5	83.9	89.4	323.5	322.7	132.3	44.4	36.5	15.2	1,273.5
Duchon	29.0	25.3	54.2	70.6	82.3	108.1	424.5	326.6	179.1	37.5	40.6	13.8	1,359.8
Naecheon	22.9	29.4	40.9	102.7	88.2	103.9	311.2	352.8	143.4	62.4	45.6	13.3	1,316.7
Seoseong	23.5	25.8	48.4	99.3	76.6	125.7	388.5	316.7	152.1	51.3	43.5	19.9	1,374.4
Gapyeong	29.5	28.0	45.9	87.0	85.6	110.5	551.1	356.9	173.1	59.6	43.0	9.2	1,559.4
Dupyeong	37.1	19.3	47.0	72.7	102.9	141.5	408.3	259.7	127.0	77.4	51.8	9.4	1,354.1
Inje	18.7	20.1	43.5	88.2	81.6	96.3	337.7	254.7	115.4	44.2	27.2	13.7	1,134.3
Seohwa	25.8	20.1	24.4	73.9	81.6	108.3	404.7	286.9	156.6	61.2	30.2	12.5	1,266.2
Yongdeeri	84.4	65.1	56.5	32.3	77.0	81.3	239.4	277.1	88.4	29.0	29.0	19.3	1,078.8
Girin	11.0	17.8	28.1	94.9	77.9	127.8	339.5	250.6	153.4	47.7	35.9	10.5	1,195.1
Changechon	29.0	23.5	62.2	105.3	68.9	108.6	463.6	243.7	155.1	41.6	49.1	13.6	1,363.2
Sanae	20.5	23.7	23.6	109.9	78.7	103.1	480.5	293.5	119.3	45.4	39.0	7.8	1,337.0
Hwachon	20.5	18.2	48.0	89.2	107.1	115.5	425.7	320.0	160.8	41.4	16.1	12.1	1,374.6
Sangseo	29.4	26.1	40.0	114.7	116.0	113.6	487.8	351.0	150.7	44.3	31.9	13.8	1,519.3
Bangan	8.0	12.0	22.8	85.1	85.5	99.9	337.0	280.2	123.4	37.0	22.3	7.3	1,130.5
Hoenggye	90.2	47.4	43.8	71.6	46.7	78.1	187.5	360.5	92.9	20.0	11.9	8.9	1,059.5
Sogriasan	10.9	20.9	29.7	74.8	68.3	99.6	145.1	186.2	147.1	66.7	25.8	24.1	898.2
Chuochon	25.2	26.4	42.0	100.7	85.9	119.6	405.4	303.5	159.0	45.9	37.0	17.1	1,372.7
Sangnam	29.5	30.1	40.6	107.3	99.5	118.7	365.3	308.5	278.3	55.6	55.7	10.4	1,500.5
Jinwi	25.4	32.5	50.4	124.4	90.3	92.3	303.5	293.5	124.1	50.9	45.8	16.9	1,250.0
Ansoong	22.6	20.7	47.5	104.2	83.6	100.4	277.0	241.9	131.8	42.6	48.5	17.4	1,148.3
Yanggu	32.5	23.2	73.5	127.2	78.2	131.5	481.4	225.3	102.5	47.7	26.3	9.5	1,358.7
Mean	28.42	29.22	43.45	96.83	86.01	103.41	353.64	280.58	146.28	47.43	38.35	15.24	1,268.86

Table B 13 Continued (2)

Nagdong River (1962-1976)													Unit : mm
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Sangbuk	27.5	42.8	63.7	153.3	135.2	157.6	310.9	215.8	163.0	48.0	48.6	22.7	1,899.3
Millyang	22.1	33.3	61.3	118.9	115.6	130.7	295.7	198.5	135.6	49.1	39.7	17.8	1,233.4
Saanae	26.1	27.4	60.5	129.6	109.8	187.1	299.2	202.1	140.3	47.8	39.6	24.2	1,372.8
Geumcheon	15.8	34.3	52.9	105.2	81.1	99.9	275.9	289.7	150.7	81.8	27.3	23.6	1,134.8
Ummin	25.5	32.1	58.4	64.1	89.3	128.5	270.2	180.7	147.7	48.7	35.4	17.4	1,124.0
Yeonggan	28.2	39.0	57.1	109.9	85.8	139.0	239.4	184.4	104.1	53.6	42.8	17.8	1,076.3
Ilju	31.7	48.4	70.5	164.7	147.1	186.8	275.6	213.6	141.4	56.8	47.7	21.0	1,405.1
Bugog	39.1	55.2	84.8	177.5	147.1	175.8	288.1	279.2	152.0	65.9	47.5	18.2	1,591.3
Taeju													
Secheon	33.5	47.7	69.5	170.4	143.1	200.1	325.4	317.6	147.6	56.9	62.3	17.5	1,631.9
Jirisan	72.3	76.4	125.1	178.6	151.4	183.0	354.3	323.9	141.9	69.9	49.6	30.0	1,752.2
Weonji	32.4	42.9	66.2	119.7	121.4	143.0	309.0	283.3	162.3	40.5	65.5	18.6	1,433.8
Sanga	28.1	42.3	66.0	126.8	118.5	159.4	273.1	240.5	116.1	55.7	37.6	14.7	1,278.7
Chahwang	30.8	47.9	71.4	115.9	119.6	151.9	307.7	275.5	137.6	64.8	45.7	31.7	1,399.2
Sancheong	38.1	44.8	73.2	150.9	108.0	176.6	317.1	329.3	170.0	43.9	43.8	17.7	1,481.3
Macheon	31.6	49.1	63.7	137.7	125.0	186.8	370.1	285.4	150.5	63.4	61.5	29.1	1,539.9
Hamyang	29.8	47.8	64.1	125.0	101.9	150.8	323.5	222.4	128.9	59.4	49.3	24.1	1,323.6
Ulsong	29.8	36.7	56.5	118.0	99.8	163.9	346.4	211.4	132.0	57.7	60.2	30.4	1,340.3
Anou	36.8	43.6	67.1	126.2	89.7	182.2	287.6	204.6	115.9	54.5	59.9	18.2	1,276.2
Seosang	28.5	40.7	53.8	112.5	103.5	158.0	307.6	218.8	97.0	64.0	54.6	16.4	1,254.2
Changnyeong	24.9	35.1	58.8	111.6	89.3	150.8	254.6	184.1	122.6	47.6	40.4	19.1	1,138.6
Sinban	23.0	37.2	61.6	140.7	115.1	163.3	284.9	193.8	124.6	44.0	41.8	20.2	1,250.2
Habecheon	27.8	37.0	57.7	114.7	106.2	163.5	289.0	203.8	123.6	45.2	41.6	23.0	1,234.0
Galgye	30.2	53.7	79.1	123.2	120.4	166.9	303.9	225.8	122.2	52.9	55.5	22.1	1,360.9
Ugryang	18.7	49.7	46.7	63.8	97.8	131.3	208.4	228.3	67.4	58.4	29.5	10.9	1,048.7
Goryeong	25.6	31.3	58.1	109.3	107.6	149.9	313.2	197.2	118.8	49.6	33.5	15.1	1,207.2
Yaro	24.9	39.6	61.0	120.0	111.7	144.5	315.3	197.2	123.4	50.5	43.5	13.4	1,245.0
Jain	25.8	27.4	58.5	85.3	81.8	103.9	289.6	159.8	109.0	60.7	38.0	21.9	1,064.9
Yeongcheon	18.6	30.8	55.5	96.1	93.0	119.3	258.6	163.8	100.6	47.2	34.9	13.1	1,022.2
Sinyeong	28.9	33.8	56.0	96.8	93.9	125.8	268.5	180.3	99.2	48.5	36.9	9.3	1,087.9
Jugyang	28.2	34.7	69.1	114.1	101.0	137.8	264.9	196.5	120.6	63.2	40.9	13.5	1,179.5
Waegwan	22.3	32.7	44.6	88.2	78.2	99.1	251.8	167.6	94.8	47.7	30.6	3.1	860.4
Jangcheon	32.1	31.8	39.3	83.7	83.7	110.0	239.6	164.5	105.6	25.7	25.6	11.8	886.4
Gimcheon	23.6	52.9	74.5	99.1	75.4	83.0	225.6	172.6	111.9	41.8	44.5	16.3	1,030.2
Jiryu	44.5	55.6	59.2	79.9	84.0	102.2	256.1	192.3	100.7	49.0	39.2	16.4	1,079.3
Buhang	28.4	32.4	55.5	100.0	94.8	137.0	310.6	174.3	113.5	50.8	35.9	12.5	1,151.7
Angye	20.7	29.3	47.0	95.5	68.4	109.0	183.3	150.4	128.8	32.2	35.3	8.8	919.6
Gunwi	19.4	29.8	56.0	81.9	78.8	96.7	234.1	181.2	105.9	41.4	33.3	13.3	851.8
Oseong	18.8	28.1	48.3	93.1	81.6	101.8	213.1	167.2	127.2	40.0	34.5	11.7	965.6
Bangju	23.1	34.5	55.4	110.3	100.1	100.8	256.1	177.8	107.8	39.5	43.5	10.3	1,069.2
Jeoncheon	27.9	32.2	54.8	114.3	105.1	129.1	265.5	191.7	132.5	44.6	41.2	14.0	1,146.7
Nonam	36.0	42.4	68.7	125.9	107.1	133.8	292.4	236.8	137.7	51.4	47.2	10.5	1,289.8
Dongro	25.7	32.7	52.5	121.4	110.9	150.1	283.3	239.5	119.9	61.5	37.8	14.0	1,259.3
Jibo	59.9	69.0	86.0	100.5	105.6	114.5	268.1	157.2	110.5	34.8	36.4	6.5	1,137.8
Iljig	32.0	41.2	55.2	96.8	86.7	105.4	229.8	167.3	95.1	42.0	33.7	21.9	1,013.1
Andong	21.4	26.5	47.9	97.6	79.8	102.0	211.1	157.8	101.7	37.6	29.6	14.9	927.9
Jassan	18.3	26.4	32.9	66.6	80.9	119.0	230.6	178.3	93.1	26.4	27.5	9.4	946.3
Hyendeong	20.2	21.3	45.8	88.2	63.8	94.2	198.4	178.6	56.3	37.6	38.0	7.3	829.9
Gilan	18.6	34.8	48.8	72.1	71.6	100.4	227.5	172.5	99.7	45.7	40.9	10.9	942.5
Hyosan	23.5	28.8	60.4	92.5	80.3	113.3	229.3	169.6	127.4	46.6	41.2	13.8	1,016.6
Cheongong	27.2	27.1	42.6	63.6	78.5	100.9	225.7	182.0	132.3	39.4	33.0	12.3	984.6
Bunam	19.9	33.7	49.1	87.6	85.0	99.4	247.2	169.1	105.0	44.8	38.6	16.4	978.4
Yeongyang	23.0	25.9	56.1	103.2	84.9	101.9	242.0	205.6	121.6	45.8	30.7	11.6	1,064.1
Yeongju	25.4	29.8	51.5	110.4	101.2	119.8	255.8	195.6	129.0	37.9	34.5	12.3	1,103.2
Buoung	31.1	29.8	38.2	96.1	95.1	132.8	250.1	207.4	124.4	35.3	32.6	12.8	1,084.5
Yeon	18.2	26.1	47.0	85.8	71.3	89.2	182.7	179.8	91.9	49.8	18.7	15.1	873.6
Seogdong	24.0	28.5	42.4	80.7	86.8	124.9	203.7	196.4	106.7	38.0	20.5	13.9	965.6
Mijil	23.9	21.4	45.6	77.8	89.2	102.1	216.4	182.1	129.2	39.9	23.7	13.0	964.3
Dochon	20.9	37.1	30.1	81.8	107.6	126.6	216.7	245.2	103.9	45.0	33.8	23.1	1,071.8
Seochyeon	25.7	32.1	32.2	116.7	126.4	137.6	287.9	276.4	195.5	61.5	61.0	16.2	1,341.2
Namhwaeryong	13.9	45.9	42.4	81.3	108.8	171.8	284.6	221.9	135.1	35.1	21.2	13.7	1,145.6
Seogpo	8.4	31.0	26.1	79.0	66.6	86.5	172.4	319.6	108.8	50.4	32.7	17.6	989.1
Hwangji	193.4	47.7	50.8	143.3	109.4	106.7	268.3	278.5	96.1	33.7	39.4	23.7	1,237.0
Bunan	28.7	39.9	71.4	164.7	163.3	204.7	254.4	204.6	175.7	55.2	60.8	23.2	1,446.6
Geochang	33.6	47.7	73.4	126.2	93.4	125.2	301.1	198.9	160.9	59.8	59.7	25.4	1,303.5
Ian	43.9	46.5	35.9	125.8	101.1	85.8	153.2	173.1	70.0	33.4	9.8	18.5	968.8
Hwasoo	29.5	40.3	79.0	150.0	164.9	93.0	187.2	253.9	76.5	58.5	16.0	21.7	1,138.5
Oseo	33.3	56.2	68.0	101.9	103.6	126.3	289.2	194.7	126.9	41.2	62.2	16.4	1,187.9
Imdong	69.1	9.8	152.0	115.7	99.2	77.8	183.6	308.8	102.6	34.4	75.5	24.8	1,320.3
Jilbo	22.3	28.2	50.3	130.1	112.8	83.9	294.3	80.2	107.6	61.4	27.0	6.9	994.9
Samgye	29.9	34.2	41.0	64.5	80.2	130.3	232.5	216.8	153.2	40.3	7.6	12.9	1,044.4
Subi	33.0	36.4	50.3	82.8	75.8	111.7	196.6	182.8	114.4	32.2	34.7	10.9	965.6
Mean	29.06	37.33	59.67	110.46	100.75	129.83	260.16	208.40	121.25	47.22	39.64	16.66	1,160.73

Table B 13 Continued (3)

Seomjin River (1962-1976)

Station	Unit: mm												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Hadong	39	59	94	183	180	167	327	332	148	52	52	24	1,655
Gurye	33	42	66	130	117	166	320	255	123	52	55	29	1,389
Seoggog	34	47	63	137	112	160	289	203	143	63	56	24	1,332
Dongbog	35	58	59	122	83	120	278	234	169	47	46	25	1,277
Bognae	34	49	60	140	124	175	296	235	152	48	47	26	1,384
Boseong	54	57	80	157	146	150	255	282	134	54	56	24	1,450
Namweon	37	50	67	116	102	134	339	235	148	60	62	30	1,381
Banam	31	39	52	125	120	172	311	193	135	45	61	18	1,304
Sunchang	39	52	68	142	116	171	324	224	138	63	67	34	1,440
Gangjin	53	54	72	135	108	159	321	204	124	66	59	32	1,387
Ssangchi	50	61	70	135	121	170	309	237	139	71	74	55	1,493
Seongsu	40	53	64	116	92	139	298	245	142	53	65	31	1,337
Jangheurg	31	55	68	141	137	206	256	245	128	60	53	30	1,412
Mean	39	52	68	137	120	161	302	240	140	57	58	29	1,403

Table B 14 AVERAGE ANNUAL BASIN RAINFALL FOR PROPOSED DAM

Unit: mm

Year	Inje	Bamseonggol	Hongcheon	Gujeol	Dalcheon	Ganjyeon	Bonghwa	Imha	Hamyang	Juam
1962			1,189	934	837			730	1,481	1,575
1963	1,232	1,371	1,686	1,386	1,066	1,723	1,042	1,211	1,478	1,652
1964	1,650	1,775	2,060	1,817	1,450	2,099	993	1,042	1,383	1,371
1965	1,141	1,286	1,221	1,037	1,104	1,191	793	918	1,395	1,333
1966	1,738	1,732	1,824	1,515	1,104	1,730	892	842	1,471	1,407
1967	991	1,142	1,045	1,041	983	915	782	770	946	987
1968	1,137	1,232	1,261	1,011	829	1,080	866	721	1,047	1,042
1969	1,361	1,588	1,475	1,391	1,372	1,646	1,163	1,294	1,894	1,788
1970	1,073	1,276	1,569	1,182	1,258	1,335	1,192	1,261	1,544	1,409
1971	987	979	1,040	982	1,054	1,366	901	813	1,199	1,257
1972	1,347	1,312	1,414	1,341	1,359	1,521	1,460	1,231	1,847	1,745
1973	829	778	894	867	920	1,026	821	801	1,288	1,287
1974	838	1,097	1,135	909	1,026	1,144	1,033	994	1,559	1,622
1975	951	925	1,221	1,154	1,135	1,143	1,335	1,167	1,589	1,472
1976	937	978	1,078	942	993	1,222	818	927	1,082	1,104
Mean	1,200	1,276	1,340	1,186	1,105	1,348	1,033	995	1,422	1,381

Table B 15 AVERAGE ANNUAL BASIN RAINFALL
FOR SELECTED RUN-OFF GAUGING STATIONS

Unit: mm

Year	Han River Basin				Nagdong River Basin			Seomjin River Basin		
	Goan Gauging Station	Cheong- pyeong Dam	Yeosu Gauging Station	Whole Basin	Jindong Gauging Station	Waegwan Gauging Station	Nam River	Whole Basin	Abrog Gauging Station	Whole Basin
1962	1,085	1,231	980	1,058	1,056	873	1,473	1,103	1,355	1,575
1963	1,421	1,516	1,311	1,401	1,216	1,063	1,528	1,309	1,651	1,673
1964	1,917	1,921	1,753	1,854	1,163	1,155	1,278	1,145	1,440	1,370
1965	1,174	1,306	1,047	1,178	1,103	971	1,356	1,118	1,380	1,345
1966	1,569	1,772	1,390	1,573	1,174	1,028	1,489	1,174	1,417	1,426
1967	1,069	1,102	962	1,047	918	844	1,022	918	998	1,005
1968	1,023	1,176	809	1,110	888	794	1,020	912	1,053	1,070
1969	1,399	1,470	1,383	1,448	1,430	1,235	1,895	1,472	1,820	1,790
1970	1,356	1,406	1,220	1,390	1,401	1,240	1,794	1,433	1,366	1,499
1971	1,084	1,030	1,059	1,099	984	901	1,245	990	1,220	1,284
1972	1,488	1,448	1,398	1,511	1,456	1,305	1,911	1,486	1,671	1,763
1973	914	931	892	952	946	842	1,229	978	1,264	1,318
1974	1,026	993	1,046	1,086	1,195	1,090	1,565	1,226	1,590	1,699
1975	1,091	1,085	1,130	1,123	1,257	1,147	1,604	1,273	1,505	1,451
1976	992	918	1,025	1,043	898	882	1,018	907	1,104	1,103
Mean	1,240	1,287	1,160	1,272	1,139	1,025	1,428	1,168	1,389	1,403

Table B 16 MONTHLY INFLOW INTO HWACHEON DAM

Catchment Area: 4,145 km²

Unit: 106 m³

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	52.2	51.1	89.7	278.4	76.1	95.4	498.7	1,217.6	794.2	114.6	68.2	49.8	3,386.0
1963	41.0	45.2	80.4	700.4	321.4	484.7	1,974.0	455.3	111.5	49.0	36.3	34.6	4,333.8
1964	39.6	29.6	55.4	1,292.1	310.7	155.5	1,794.5	1,256.2	684.3	163.4	70.0	37.5	5,888.8
1965	29.5	31.5	80.4	108.9	58.9	23.3	1,923.1	999.0	222.9	63.5	75.7	30.0	3,646.7
1966	18.8	38.7	125.9	137.4	96.4	417.3	2,493.6	969.6	1,026.4	133.9	67.4	40.2	5,565.6
1967	24.1	24.2	184.8	187.1	151.6	75.2	873.2	1,090.1	469.7	88.9	44.1	32.7	3,245.7
1968	27.3	23.6	59.2	80.4	41.5	67.4	562.7	674.4	290.0	516.7	180.7	103.4	2,627.3
1969	46.3	49.1	131.2	732.0	552.6	173.2	1,079.4	1,338.4	149.8	67.5	45.6	29.2	4,394.3
1970	22.2	26.6	47.9	68.7	34.8	46.1	871.3	655.1	1,434.2	138.2	114.3	64.6	3,524.0
1971	34.8	33.9	92.1	132.7	185.1	115.3	1,075.9	700.9	541.7	142.2	73.6	46.9	3,175.1
1972	41.0	46.1	219.4	338.5	79.8	58.6	353.6	2,071.5	436.2	153.2	222.1	131.5	4,151.5
1973	65.9	50.6	71.0	227.6	327.0	110.2	233.6	921.6	825.3	107.4	87.4	48.2	3,075.8
1974	39.9	34.1	45.3	175.0	227.1	176.5	112.2	668.8	219.2	79.3	54.7	34.0	1,866.1
1975	20.6	18.1	36.4	108.6	152.7	92.5	1,451.7	518.5	822.2	106.6	77.0	34.0	3,438.9
1976	24.6	41.3	118.4	83.5	67.8	39.7	85.7	914.4	400.0	77.7	57.5	42.6	1,953.2
Total	527.8	543.7	1,437.5	4,651.3	2,683.5	2,130.9	15,383.2	14,451.4	8,427.6	2,002.1	1,274.6	759.2	54,272.8
Mean	35.2	36.2	95.8	310.0	178.9	142.1	1,025.5	963.4	561.8	133.5	85.0	50.6	3,618.2

Table B 17 MONTHLY OUTFLOW FROM CHEONGYEONG DAM

Unit: 10^6 m^3

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	282.0	265.6	323.6	505.7	253.6	264.4	408.5	2,224.4	1,795.7	333.2	261.5	254.7	7,173.0
1963	181.1	187.5	158.6	1,185.1	771.6	1,522.3	5,083.9	1,027.7	339.6	261.9	160.7	134.7	11,014.6
1964	146.2	113.0	171.4	2,638.4	949.8	564.0	3,972.6	3,513.8	2,173.7	416.0	174.2	100.4	14,933.5
1965	180.8	152.9	218.8	208.9	162.3	92.0	4,923.0	2,156.4	484.2	221.8	185.8	204.9	9,191.7
1966	173.8	166.0	376.9	425.1	388.4	770.3	7,579.1	2,211.3	2,434.4	360.2	301.7	281.0	15,468.1
1967	214.5	242.9	396.9	481.3	354.6	233.3	1,483.3	2,212.9	1,312.1	308.6	295.2	226.6	7,762.2
1968	104.2	121.0	197.9	214.9	104.5	88.1	1,057.2	1,955.8	761.3	980.3	492.5	377.7	6,455.2
1969	259.8	246.8	388.4	1,555.2	1,449.0	655.8	2,182.9	3,623.8	445.8	208.9	127.0	128.6	11,272.0
1970	136.6	125.8	174.0	189.2	163.4	173.7	2,271.3	1,636.5	4,118.7	391.0	338.3	233.0	9,951.6
1971	192.8	164.5	321.4	300.7	488.2	331.8	2,257.9	1,833.4	964.2	425.9	208.9	182.1	7,651.8
1972	150.0	213.0	503.5	759.5	305.3	184.8	557.1	4,845.2	811.3	329.4	354.8	308.0	9,322.0
1973	198.2	166.9	208.9	311.0	616.0	251.4	321.4	803.5	1,218.2	195.5	342.1	345.5	4,978.9
1974	254.4	188.7	166.1	375.8	918.7	666.1	601.3	1,082.1	585.8	372.3	438.0	190.2	5,839.6
1975	150.0	140.3	128.6	114.0	249.1	300.7	2,531.1	358.9	969.4	447.3	233.3	375.0	5,997.6
1976	289.3	255.6	318.7	368.1	417.8	337.0	369.6	1,663.3	676.5	364.3	305.9	339.3	5,706.1
Total	2,913.8	2,750.0	4,053.8	9,632.9	7,572.4	6,435.7	35,600.0	31,149.0	19,090.9	5,616.6	4,220.0	3,682.5	132,717.9
Mean	194.3	183.4	270.3	642.2	504.8	429.0	2,373.3	2,076.6	1,272.7	374.4	281.3	245.5	8,847.9

Table B 18 MONTHLY RUN-OFF AT JEONGSEON GAUGE

Unit: 10⁶ m³

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	3.8	74.3	35.4	80.8	46.6	76.1	124.5	307.0	275.4	53.8	18.3	21.5	1,117.5
1963	7.2	1.1	48.2	252.4	77.7	207.0	276.6	222.0	14.3	19.7	17.2	16.4	1,159.8
1964	16.3	13.5	44.1	609.0	107.8	82.5	228.8	142.9	326.9	122.5	31.4	18.5	1,744.2
1965	11.6	6.5	50.4	27.2	62.1	30.6	460.6	68.7	25.1	17.1	60.5	25.9	846.3
1966	12.0	34.9	60.4	67.9	83.4	74.9	447.2	152.7	233.2	46.9	28.6	15.4	1,257.5
1967	0.7	18.0	79.1	126.9	76.7	34.6	191.7	96.3	159.9	32.9	33.5	36.4	886.7
1968	14.5	33.9	67.3	40.1	50.5	45.7	219.5	273.2	94.8	132.3	159.1	33.2	1,164.1
1969	35.3	31.4	37.2	360.8	87.7	81.6	186.0	226.8	19.0	11.8	0.8	0.5	1,078.9
1970	6.4	33.8	69.7	35.2	25.7	24.6	247.8	81.1	324.5	64.3	50.9	26.5	990.5
1971	20.6	20.6	44.2	75.2	105.2	30.9	321.5	332.7	81.2	35.0	26.7	14.5	1,108.3
1972	11.4	20.2	250.1	200.9	73.5	40.2	38.4	446.7	217.0	113.3	64.4	27.6	1,503.7
1973	0.4	0.7	16.1	38.8	54.1	11.6	33.4	40.6	63.2	15.1	16.4	7.9	298.3
1974	14.1	24.3	11.7	82.6	105.9	12.4	171.3	82.8	62.9	10.9	8.3	8.0	595.2
1975	14.5	23.3	64.3	234.0	103.9	69.6	323.0	182.8	277.0	187.2	50.2	40.7	1,570.5
1976	8.2	8.3	37.2	50.8	23.0	13.0	24.2	381.5	75.9	26.2	0.6	0.7	649.6
Total	177.0	344.8	915.4	2,282.6	1,083.8	835.3	3,294.5	3,037.8	2,250.3	889.0	566.9	293.7	15,971.1
Mean	11.8	23.0	61.0	152.2	72.3	55.7	219.6	202.5	150.0	59.3	37.8	19.6	1,064.7

Table B 19 MONTHLY RUN-OFF AT CHUNGJU GAUGE

Unit: 10⁶ m³

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	102.0	88.5	113.0	291.2	120.5	90.4	21.3	1,116.6	1,459.9	212.2	99.5	76.2	3,791.3
1963	36.8	30.1	76.3	959.7	517.7	1,137.9	2,514.4	695.5	143.8	70.8	44.1	44.6	6,271.7
1964	41.9	28.3	93.5	2,067.2	561.2	240.4	1,788.9	1,059.9	2,077.7	302.9	122.9	68.6	8,453.4
1965	42.6	40.5	95.6	116.9	98.1	43.3	2,495.9	421.3	147.1	65.5	131.3	60.7	3,758.8
1966	28.1	56.5	465.4	244.9	202.1	259.5	1,947.6	909.6	1,363.7	161.7	141.2	103.7	5,884.0
1967	45.0	71.4	175.5	358.0	204.7	94.5	673.1	428.4	1,007.2	126.9	95.5	122.4	3,402.6
1968	37.9	25.2	91.0	156.7	53.1	91.3	829.4	885.6	284.0	343.6	275.5	127.8	3,201.1
1969	64.8	192.9	337.4	1,244.4	500.6	111.0	1,069.9	2,302.0	723.5	190.4	76.4	61.6	6,814.9
1970	28.2	51.2	70.9	196.9	159.1	157.8	1,632.1	875.1	1,910.5	221.9	149.8	103.7	5,557.2
1971	59.0	62.5	186.5	216.3	362.8	115.5	2,053.2	1,047.9	312.2	116.5	57.7	33.9	4,624.0
1972	70.8	115.2	604.6	698.8	311.5	67.4	209.7	3,208.5	1,314.7	411.2	664.1	304.6	7,981.1
1973	213.0	199.9	169.8	538.4	568.1	162.7	321.2	553.8	478.0	151.0	173.6	104.9	3,634.4
1974	46.0	69.1	209.6	753.3	910.2	194.5	1,056.2	738.4	402.1	123.1	81.2	81.9	4,665.6
1975	47.4	50.2	209.5	811.9	716.5	282.9	1,995.4	1,009.0	1,685.3	419.2	370.8	182.8	7,780.9
1976	82.8	215.1	569.5	461.9	376.2	177.4	228.8	2,575.8	813.5	141.6	82.2	210.7	5,935.5
Total	946.3	1,236.6	3,468.1	9,116.5	5,662.4	3,226.5	18,837.1	17,827.4	14,123.2	3,058.5	2,564.8	1,688.1	81,755.5
Mean	63.1	82.4	231.2	607.8	377.5	215.1	1,255.8	1,188.5	941.5	203.9	171.0	112.5	5,450.4

Table B 20 MONTHLY RUN-OFF AT YEOJU GAUGE

Unit: 106 m³

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	187.2	246.0	172.6	455.0	174.6	139.7	306.0	1,520.9	1,991.2	411.0	144.6	121.6	5,870.4
1963	92.2	89.8	110.5	1,220.8	739.6	1,670.2	3,547.5	991.9	256.5	150.9	117.9	116.8	9,104.6
1964	111.9	89.5	149.5	2,826.8	725.6	291.5	2,608.5	1,734.7	2,932.6	476.4	167.5	95.7	12,210.2
1965	85.2	70.3	118.4	243.8	144.1	68.2	3,670.2	815.3	234.6	133.0	276.3	115.7	5,975.1
1966	64.4	86.2	749.5	282.9	271.3	346.4	3,534.4	1,423.7	1,864.2	244.0	214.8	132.9	9,214.7
1967	91.5	158.2	354.4	597.2	317.5	118.2	1,040.4	831.5	1,306.4	221.7	169.8	212.0	5,418.8
1968	61.0	36.9	143.9	229.3	76.4	139.6	1,245.5	1,271.3	515.5	493.6	474.8	197.0	4,884.8
1969	96.4	333.2	513.5	1,555.4	902.8	171.5	1,363.5	3,780.3	1,399.9	335.0	109.9	81.7	10,643.1
1970	43.2	105.2	94.6	264.4	233.8	213.1	2,717.8	1,197.9	2,857.2	524.9	269.2	197.0	8,718.3
1971	105.8	94.1	396.7	396.7	575.8	211.9	3,311.6	1,640.2	611.1	236.9	109.5	90.2	7,780.5
1972	125.9	196.2	895.6	936.1	491.5	143.4	359.6	4,391.5	1,755.0	852.5	955.4	696.5	11,739.2
1973	797.7	679.3	587.9	1,006.7	1,027.3	470.7	878.9	1,085.6	1,033.5	538.7	500.3	365.0	8,991.6
1974	253.1	210.4	241.6	1,433.4	1,835.1	462.8	1,849.6	1,144.1	647.9	266.9	163.0	133.0	8,640.9
1975	90.7	99.8	317.2	1,123.5	1,065.5	301.6	2,691.6	1,510.2	1,935.6	601.7	564.0	392.8	10,694.2
1976	104.0	376.4	590.1	667.7	548.2	250.3	466.8	3,803.1	1,088.8	432.7	324.7	465.0	9,117.8
Total	2,310.2	2,871.5	5,376.0	13,239.7	9,129.1	4,999.1	29,591.9	27,142.2	20,430.0	5,939.9	4,561.7	3,412.9	129,004.2
Mean	154.0	191.4	358.4	882.6	608.6	333.3	1,972.8	1,809.5	1,362.0	396.0	304.1	227.5	8,600.3

Table B 21 MONTHLY OUTFLOW FROM GOESAN DAM

Unit: 10⁶ m³

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	8.0	8.5	6.7	3.4	9.4	6.2	13.9	52.2	198.8	20.8	7.0	6.7	341.6
1963	4.0	4.8	4.6	31.9	110.4	106.0	226.3	32.9	16.6	7.2	3.4	4.3	552.4
1964	4.6	5.0	17.1	178.8	46.3	10.9	124.3	167.9	161.0	20.4	11.1	6.4	753.8
1965	5.6	8.2	26.0	4.7	5.1	0.5	435.5	57.3	13.7	6.2	13.5	2.7	579.0
1966	2.9	9.4	36.4	10.1	14.7	67.9	81.4	48.5	72.3	16.3	14.5	13.7	388.1
1967	4.6	6.5	18.7	27.7	8.0	14.8	103.9	80.4	49.8	10.2	9.8	12.6	347.0
1968	5.6	3.0	11.0	14.3	2.1	2.3	60.8	49.3	9.8	22.5	22.0	14.2	216.9
1969	8.3	47.7	24.1	87.1	62.9	6.0	129.1	284.7	114.0	23.0	13.0	5.6	805.5
1970	3.7	6.8	13.1	38.4	21.7	16.6	170.6	74.5	210.0	43.7	21.5	8.6	629.2
1971	10.7	9.2	23.3	12.7	16.1	47.7	246.4	114.4	41.5	11.8	4.4	3.7	541.9
1972	5.1	12.3	94.0	47.7	19.8	7.3	54.1	165.8	68.9	16.9	36.8	22.2	550.9
1973	31.9	20.3	8.8	22.6	28.4	7.5	35.4	38.8	22.6	7.8	8.0	7.2	239.3
1974	4.6	6.5	26.8	54.4	47.4	12.4	131.8	26.2	21.5	6.7	4.1	4.0	346.4
1975	2.7	1.7	17.1	32.4	32.7	7.3	119.7	54.6	130.9	19.6	12.4	12.9	444.0
1976	4.8	18.0	19.0	40.4	14.2	4.9	5.6	228.2	25.4	7.0	7.0	10.2	384.7
Total	107.1	167.9	346.7	606.6	439.2	318.3	1,938.8	1,475.7	1,156.8	240.1	188.5	135.0	7,120.7
Mean	7.1	11.2	23.1	40.4	29.3	21.2	129.3	98.4	77.1	16.0	12.6	9.0	474.7

Table B 22 MONTHLY RUN-OFF AT GOAN GAUGE

Unit: 10^6 m^3

Catchment Area: 23,613 km^2

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Total Oct. to June
1962	484.0	527.8	511.8	990.9	441.8	416.8	2,438.3	3,863.3	3,906.2	767.6	418.9	388.1	13,454.2	5,778.5
1963	295.4	299.7	290.9	2,601.0	1,633.8	3,451.5	9,331.5	2,183.4	644.4	446.3	301.2	271.9	21,751.0	10,146.9
1964	299.7	235.0	372.5	6,344.2	1,944.8	993.1	7,639.5	6,092.5	5,927.4	1,035.8	396.6	227.7	31,508.8	11,208.7
1965	304.8	255.8	386.5	518.9	351.2	183.6	9,848.3	3,405.7	823.7	406.6	529.6	367.4	17,382.1	3,660.9
1966	263.8	279.1	1,246.8	783.7	730.3	1,236.2	12,302.2	4,023.8	4,758.4	668.8	571.7	458.1	27,322.9	5,843.5
1967	326.0	427.3	800.6	1,149.1	716.1	374.5	2,688.8	3,243.6	2,789.8	565.0	495.5	467.3	14,043.6	5,492.2
1968	173.2	165.5	358.3	465.5	189.5	238.7	2,413.3	3,382.1	1,338.1	1,544.7	1,013.7	602.2	11,884.8	3,118.5
1969	394.7	642.7	999.4	3,447.1	2,606.3	916.8	3,930.0	8,205.2	2,045.4	602.8	262.5	233.0	24,285.9	12,167.6
1970	197.2	253.4	294.8	497.6	435.7	424.3	5,472.9	3,109.2	7,652.3	1,004.8	666.4	471.7	20,480.3	3,201.3
1971	322.9	278.6	776.3	754.0	1,128.7	587.8	6,021.1	3,755.3	1,703.1	716.5	344.2	294.4	16,683.9	5,991.2
1972	305.1	452.3	1,480.5	1,874.5	880.9	362.9	1,013.4	10,211.8	2,837.2	1,306.7	1,448.6	1,110.6	23,284.5	6,711.3
1973	1,067.1	906.8	853.8	1,411.9	1,760.8	773.7	1,286.1	2,024.2	2,412.7	808.2	902.6	761.3	14,969.2	10,640.0
1974	545.7	429.1	438.3	1,945.0	2,960.5	1,213.7	2,634.9	2,393.3	1,326.3	687.2	646.2	347.4	15,567.6	10,004.4
1975	261.8	261.2	485.0	1,346.4	1,430.3	655.2	5,682.3	2,033.6	3,160.7	1,141.3	867.4	835.3	18,160.5	6,120.7
1976	423.7	680.8	979.1	1,115.9	1,040.8	632.7	901.1	5,889.1	1,901.8	859.6	679.3	867.5	15,970.4	7,717.0
Total	5,665.1	6,096.1	10,274.6	25,245.7	18,251.5	12,461.5	71,902.4	63,816.1	43,227.5	12,560.9	9,544.4	7,703.9	286,749.7	
Mean	377.7	406.4	685.0	1,683.0	1,216.8	830.8	4,793.5	4,254.4	2,881.8	837.4	636.3	513.6	19,116.6	

Table B 23 MONTHLY RUN-OFF AT IMHA GAUGE

Catchment Area: 1,361 km² Unit: 10⁶ m³

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	1.5	8.1	8.8	34.2	10.1	34.0	72.0	114.6	93.2	15.0	30.2	26.3	448.0
1963	24.7	22.3	17.0	127.2	129.6	294.7	330.6	114.3	35.1	5.6	3.0	0.9	1,105.0
1964	0.3	0.6	33.3	174.3	67.5	3.5	133.6	3.8	145.8	10.5	4.3	1.0	578.5
1965	0.5	0.4	0.4	0.3	7.8	1.2	408.7	23.8	10.5	5.3	34.2	15.7	508.8
1966	9.2	9.1	171.3	33.1	17.3	25.9	130.3	82.1	112.7	101.2	82.5	67.1	841.8
1967	52.6	21.8	14.7	49.4	10.9	14.3	107.7	5.1	47.4	5.7	9.7	11.1	350.4
1968	4.1	3.1	4.2	7.6	6.3	13.4	38.3	163.6	19.7	42.2	16.9	11.0	330.4
1969	8.4	39.7	55.5	135.4	29.9	14.0	61.6	238.4	269.1	49.1	18.8	15.8	935.7
1970	11.2	16.3	24.3	41.8	74.0	43.2	386.5	199.5	223.7	27.9	22.3	17.3	1,088.0
1971	19.4	25.7	41.6	31.6	44.3	35.0	203.4	100.4	36.6	24.1	16.0	10.3	588.4
1972	14.8	33.0	193.2	138.5	141.4	22.2	122.1	209.5	217.9	67.0	87.3	115.3	1,362.2
1973	155.2	29.3	15.6	77.4	57.8	23.3	49.7	123.2	58.6	63.1	41.8	27.3	722.3
1974	21.4	23.5	43.4	100.6	151.5	39.9	273.1	111.8	80.2	33.4	29.3	30.3	938.4
1975	33.8	27.9	76.1	84.0	125.6	70.5	350.2	109.8	145.8	79.8	129.5	71.5	1,304.5
1976	37.3	58.8	121.9	84.7	74.8	52.1	35.3	287.6	73.2	39.7	32.4	33.0	930.8
Total	394.4	319.6	821.3	1,120.1	948.8	687.2	2,703.1	1,887.5	1,569.5	569.6	558.2	453.9	12,033.2
Mean	26.3	21.3	54.8	74.7	63.3	45.8	180.2	125.8	104.6	38.0	37.2	30.3	802.2

Table B 24 MONTHLY RUN-OFF AT WAEGWAN GAUGE

Catchment Area: 11,074 km² Unit: 106 m³

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	47.1	24.2	24.0	104.0	30.2	15.0	99.6	740.9	1,627.1	145.7	41.3	26.4	2,925.5
1963	10.5	8.2	13.8	422.9	435.5	1,712.8	2,187.5	633.5	371.2	46.6	20.4	17.4	5,880.3
1964	17.6	30.7	145.6	1,734.1	628.2	63.9	1,181.5	205.5	1,388.1	151.4	55.4	24.5	5,626.5
1965	18.0	20.0	24.4	15.9	31.5	10.8	3,184.2	457.1	238.4	118.5	240.8	99.4	4,459.0
1966	71.4	112.8	1,107.7	220.8	235.9	309.2	1,046.7	461.2	662.7	293.9	167.6	123.0	4,812.9
1967	54.3	102.1	151.1	389.9	133.6	120.7	1,148.7	131.4	606.5	102.5	79.0	112.1	3,082.0
1968	28.1	20.1	36.2	69.8	19.4	53.9	513.8	1,431.5	190.4	279.1	173.6	121.0	2,936.9
1969	106.6	430.0	241.9	912.6	505.4	101.2	502.6	2,442.0	1,802.3	419.8	117.2	87.6	7,669.2
1970	42.5	105.1	126.2	231.3	392.2	188.1	264.6	1,460.4	1,993.1	240.5	141.4	111.8	5,297.2
1971	91.6	112.0	229.9	136.9	230.7	183.6	2,056.8	917.7	277.4	135.5	73.8	54.8	4,500.7
1972	66.6	119.3	589.5	1,006.0	776.7	92.9	732.4	1,604.0	715.7	245.3	447.1	178.7	6,574.2
1973	479.5	238.8	123.2	464.0	527.0	78.4	257.6	594.1	310.9	209.0	145.4	69.3	3,497.2
1974	58.0	82.7	226.5	533.7	1,070.6	188.0	2,292.7	749.9	296.3	155.0	81.3	87.2	5,821.9
1975	66.8	50.8	258.9	398.0	664.8	217.3	2,291.6	616.9	983.7	338.2	342.9	205.5	6,435.4
1976	101.7	249.7	356.9	168.9	118.0	190.5	108.0	1,506.6	457.3	136.7	126.1	0.9	3,521.3
Total	1,260.3	1,706.5	3,655.9	6,758.8	5,799.7	3,526.3	17,868.3	13,952.7	11,921.1	3,017.7	2,253.3	1,319.6	73,040.2
Mean	84.0	113.8	243.7	450.6	386.6	235.1	1,191.2	930.2	794.7	201.2	150.2	88.0	4,869.3

Table B 25 MONTHLY RUN-OFF AT JINDONG GAUGE

Unit: 10^6 m^3

Catchment Area: 20,311 km^2

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Total Oct. to June
1962	256.4	207.5	176.8	519.0	207.6	174.9	1,007.4	3,025.4	4,013.7	656.7	302.1	244.6	10,792.1	3,324.0
1963	170.6	149.9	172.8	906.6	691.7	5,336.1	5,314.9	1,407.9	1,050.3	400.8	294.8	282.6	16,179.0	8,631.1
1964	290.7	398.1	576.8	2,546.5	1,443.5	309.1	2,141.2	527.6	2,028.8	461.1	272.7	220.1	11,216.2	6,542.9
1965	178.2	179.7	197.0	174.5	265.3	152.0	7,260.5	1,945.7	958.7	486.3	908.2	403.9	13,110.0	2,100.6
1966	285.5	352.7	2,586.6	609.8	624.7	500.8	2,291.2	1,806.1	1,730.3	562.6	306.2	219.8	11,876.3	6,758.5
1967	142.5	171.0	309.0	837.1	301.2	485.9	2,124.8	213.1	889.3	186.1	152.8	205.5	6,018.3	3,335.3
1968	97.3	73.1	117.0	168.3	88.9	119.5	973.4	3,567.2	465.1	724.6	293.4	207.2	6,895.0	1,208.5
1969	147.5	690.6	307.9	1,666.2	925.8	152.8	1,604.4	4,749.8	4,352.8	898.5	244.8	197.5	15,938.6	5,116.0
1970	154.8	181.9	246.1	471.7	817.6	562.6	5,986.1	2,815.2	4,977.7	630.0	314.0	239.9	16,497.6	3,775.5
1971	218.8	209.5	427.0	263.7	341.7	404.9	3,011.9	1,737.2	437.1	235.4	146.7	127.2	7,561.1	3,049.5
1972	117.5	178.0	819.3	1,732.4	1,358.0	185.0	2,487.5	3,059.6	1,565.9	390.6	721.0	304.0	12,918.8	4,899.5
1973	646.9	315.8	175.3	1,005.0	1,242.1	120.6	306.4	1,254.1	697.7	316.0	234.4	105.9	6,420.2	4,921.3
1974	72.6	90.8	272.0	934.2	1,779.1	533.1	4,874.0	1,420.9	503.2	483.0	169.0	154.4	11,286.3	4,338.1
1975	120.6	103.4	318.9	711.1	1,225.1	434.4	4,264.1	1,674.1	1,645.9	583.1	614.3	327.5	12,022.5	3,719.9
1976	564.2	686.3	692.6	464.8	699.0	808.1	486.3	1,998.5	916.9	634.5	589.0	558.3	9,098.5	5,439.9
Total	3,464.1	3,988.3	7,395.1	13,010.9	12,011.3	10,279.8	44,134.1	31,202.4	25,333.4	7,649.3	5,563.4	3,798.4	167,830.5	
Mean	230.9	265.9	493.0	867.4	800.8	685.3	2,942.3	2,080.2	1,688.9	510.0	370.9	253.2	11,188.7	

Table B 26 MONTHLY RUN-OFF AT CHANGRI GAUGE

Unit: 106 m³

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	3.8	6.2	2.3	57.2	17.2	50.6	124.2	324.3	169.4	29.5	23.3	15.9	823.9
1963	12.8	9.5	13.8	51.4	68.1	373.8	358.4	74.2	22.7	14.3	6.0	4.9	1,009.9
1964	3.0	9.1	46.1	170.6	83.1	9.3	155.0	9.3	111.8	20.5	8.5	4.0	630.3
1965	3.6	5.7	8.9	9.0	14.7	2.1	476.1	48.5	11.5	11.6	56.9	10.6	659.2
1966	4.2	10.8	145.4	28.1	27.5	17.3	158.4	254.5	98.0	30.9	19.1	10.8	805.0
1967	4.2	9.8	20.8	41.0	6.1	71.5	113.5	4.1	22.2	14.2	19.9	12.6	339.9
1968	3.6	2.8	15.6	19.9	7.4	8.0	73.4	223.6	22.0	71.0	28.8	16.8	492.9
1969	12.8	66.9	45.6	137.1	72.0	8.5	260.6	359.4	304.3	98.1	29.2	20.4	1,414.9
1970	13.3	25.2	38.3	68.9	86.4	130.0	408.9	142.1	251.0	56.6	30.2	22.6	1,273.5
1971	22.8	33.3	65.9	32.9	30.8	58.6	234.5	224.5	55.1	27.4	14.3	10.6	810.7
1972	27.8	43.3	141.0	103.8	192.7	36.3	283.8	247.9	81.6	33.8	65.9	26.8	1,284.7
1973	28.9	29.3	22.6	115.7	98.1	8.1	42.4	125.7	86.1	61.5	32.1	19.2	669.7
1974	14.0	17.1	34.0	72.5	134.8	65.6	443.7	86.4	26.0	75.0	14.5	15.9	999.5
1975	7.2	7.3	33.3	120.0	124.0	108.1	257.1	119.8	71.7	47.5	37.7	25.6	959.3
1976	24.4	56.5	58.2	33.1	62.2	63.6	38.3	291.9	48.7	35.1	26.9	27.2	766.1
Total	186.4	332.8	691.8	1,061.2	1,025.1	1,011.4	3,428.3	2,536.2	1,382.1	627.0	413.3	243.9	12,939.5
Mean	12.4	22.2	46.1	70.7	68.3	67.4	228.6	169.1	92.1	41.8	27.6	16.3	862.6

Table B 27 MONTHLY RUN-OFF AT ABOG GAUGE

Catchment Area: 2,448 km²

Unit: 10⁶ m³

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Total Oct. to June
1962	11.6	17.8	6.4	88.7	3.3	23.3	281.2	447.6	662.5	47.0	32.3	19.3	1,641.0	218.5
1963	16.7	28.5	32.0	140.1	216.4	845.0	706.6	56.2	26.1	12.5	5.5	6.0	2,091.7	1,377.3
1964	4.6	76.8	51.4	362.3	150.3	14.6	658.4	144.6	446.0	33.5	19.2	12.8	1,974.6	684.0
1965	21.6	43.6	27.2	24.3	40.0	6.8	784.8	113.4	24.6	14.9	64.8	18.6	1,184.5	229.0
1966	13.0	34.3	243.4	67.8	83.6	47.9	331.7	497.5	165.7	40.9	32.3	21.9	1,579.9	538.3
1967	18.8	25.4	38.2	80.4	17.1	74.1	234.3	9.8	24.8	9.5	31.5	26.9	590.5	349.1
1968	11.5	11.2	50.1	49.5	9.1	9.1	12.5	271.3	23.5	112.4	30.3	23.4	613.8	208.4
1969	34.5	91.2	25.7	207.6	151.9	6.7	438.8	677.9	749.3	79.2	13.6	17.7	2,494.1	683.7
1970	26.5	32.8	33.1	69.1	78.8	55.3	660.5	178.4	548.9	132.6	135.1	40.9	1,991.8	406.1
1971	138.3	73.9	47.5	34.7	29.7	153.0	679.6	316.1	109.0	42.7	32.1	26.4	1,683.0	785.7
1972	49.9	55.8	261.9	117.3	204.8	21.6	832.1	635.9	104.9	44.8	105.5	91.9	2,526.4	812.5
1973	85.5	53.4	37.8	183.0	410.2	13.3	60.8	249.8	162.4	65.9	38.4	26.5	1,386.9	1,025.4
1974	18.7	40.7	65.5	151.9	402.1	103.7	607.1	201.0	93.8	118.5	21.3	26.3	1,850.8	913.4
1975	13.7	13.5	34.7	157.7	72.0	70.8	614.1	243.6	147.5	86.3	27.0	26.6	1,507.5	528.5
1976	20.4	89.5	52.4	34.2	84.0	334.1	19.1	80.2	27.1	15.7	21.7	30.0	808.3	754.5
Total	485.3	688.4	1,007.3	1,768.6	1,953.3	1,779.3	6,921.6	4,123.3	3,316.1	856.4	610.6	415.2	23,924.8	
Mean	32.4	45.9	67.2	117.9	130.2	118.6	461.4	274.9	221.1	57.1	40.7	27.7	1,595.0	

Table B 28 MONTHLY SPILLOUT FROM BOSEONGGANG DAM

Unit: 106 m³

Catchment Area: 275 km²

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	0	0	0	29.3	0	4.0	38.7	84.0	98.4	4.1	0	0.2	258.7
1963	0	0	0	12.6	9.8	192.9	85.8	0.1	0	0	0	0	301.2
1964	0	2.5	0	12.4	12.8	4.9	0	24.1	21.0	0	0	0	77.7
1965	0	0	0	0.7	0.1	0	57.0	23.0	0.4	0	3.9	0	85.1
1966	0	0	18.6	10.7	6.8	0	22.7	83.6	37.5	2.5	0	0	182.4
1967	0	0	0	8.2	0.1	4.1	32.1	0	0	0	0	0	44.5
1968	0	0	0	0	0	0	0	27.6	0	13.1	0	0	40.7
1969	0	1.5	0	10.4	9.6	0	51.4	103.9	109.1	1.9	0	0	287.8
1970	0	0	0	2.9	4.8	13.7	115.7	62.4	99.3	0.8	0	0	299.6
1971	0	0	0	0	0	52.4	60.5	36.7	15.3	0.3	0	0	165.2
1972	0	0.3	22.0	7.0	26.8	0	132.6	114.1	11.9	0.3	7.0	0	322.0
1973	0	0	0	20.2	73.4	0	36.7	18.2	21.3	0	0	0	169.8
1974	0	0	0	5.4	67.8	25.9	115.2	90.3	16.1	2.4	2.6	3.8	329.5
1975	1.3	0	0	29.3	16.6	2.1	43.1	21.7	8.8	3.0	0	0	125.9
1976	0	5.0	0.5	8.6	4.8	53.7	5.1	8.6	2.3	0	0	0	88.6
Total	1.3	9.3	41.1	157.7	233.4	353.7	796.6	698.3	441.4	28.4	13.5	4.0	2,778.7
Mean	0.09	0.6	2.7	10.5	15.6	23.6	53.1	46.6	29.4	1.9	0.9	0.3	185.2

Table B 29 ESTIMATED MONTHLY RUN-OFF AT DALCHEON DAMSITE

Catchment Area: 1,348 km² Unit: 10⁶ m³

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	21.2	34.0	15.7	30.8	17.0	13.6	60.2	112.4	255.7	51.2	13.5	13.3	638.6
1963	12.8	14.2	9.6	71.1	129.4	178.9	364.3	78.0	33.0	19.7	15.4	15.9	942.3
1964	15.7	14.6	23.8	278.2	66.5	17.8	243.2	254.6	279.6	46.5	16.9	10.0	1,267.4
1965	11.9	11.9	25.4	25.6	12.1	4.7	561.8	114.9	26.4	16.6	36.0	11.6	858.9
1966	8.6	12.9	78.8	14.9	24.0	71.2	338.8	128.1	145.5	27.6	24.6	16.3	891.3
1967	11.7	20.3	46.1	63.9	25.9	16.3	149.0	135.5	92.4	24.6	20.9	25.8	632.4
1968	8.6	4.5	18.1	24.2	5.8	10.2	121.6	106.8	47.8	44.3	52.3	23.6	467.8
1969	12.3	73.8	50.1	125.4	121.0	15.3	157.2	488.8	210.2	43.8	16.5	8.1	1,322.5
1970	5.7	14.8	14.9	43.3	30.8	23.2	327.1	116.9	335.9	88.0	38.3	23.1	1,062.0
1971	16.9	13.0	55.3	41.4	49.7	56.0	419.5	196.1	85.5	30.4	12.5	12.7	989.0
1972	13.6	24.0	117.4	80.1	47.2	19.0	70.5	339.7	132.4	89.5	80.3	85.4	1,099.1
1973	126.4	98.8	78.8	98.8	102.1	58.9	124.7	123.1	113.7	76.2	62.5	50.5	1,114.5
1974	39.2	29.6	27.7	161.4	197.5	56.2	244.9	91.1	59.9	30.1	17.4	12.1	967.1
1975	9.6	9.9	32.6	80.1	86.8	9.2	218.3	131.0	151.3	47.4	43.4	46.6	866.2
1976	7.6	42.5	19.3	68.7	41.2	16.5	45.4	399.0	68.1	55.6	47.3	51.9	863.1
Total	321.8	418.8	613.6	1,207.9	957.0	567.0	3,446.5	2,816.0	2,037.4	691.5	497.8	406.9	13,982.2
Mean	21.5	27.9	40.9	80.5	63.8	37.8	229.8	187.7	135.8	46.1	33.2	25.1	932.1

Table B 30 ESTIMATED MONTHLY RUN-OFF AT GANHYEON DAMSITE

Unit: 10⁶ m³

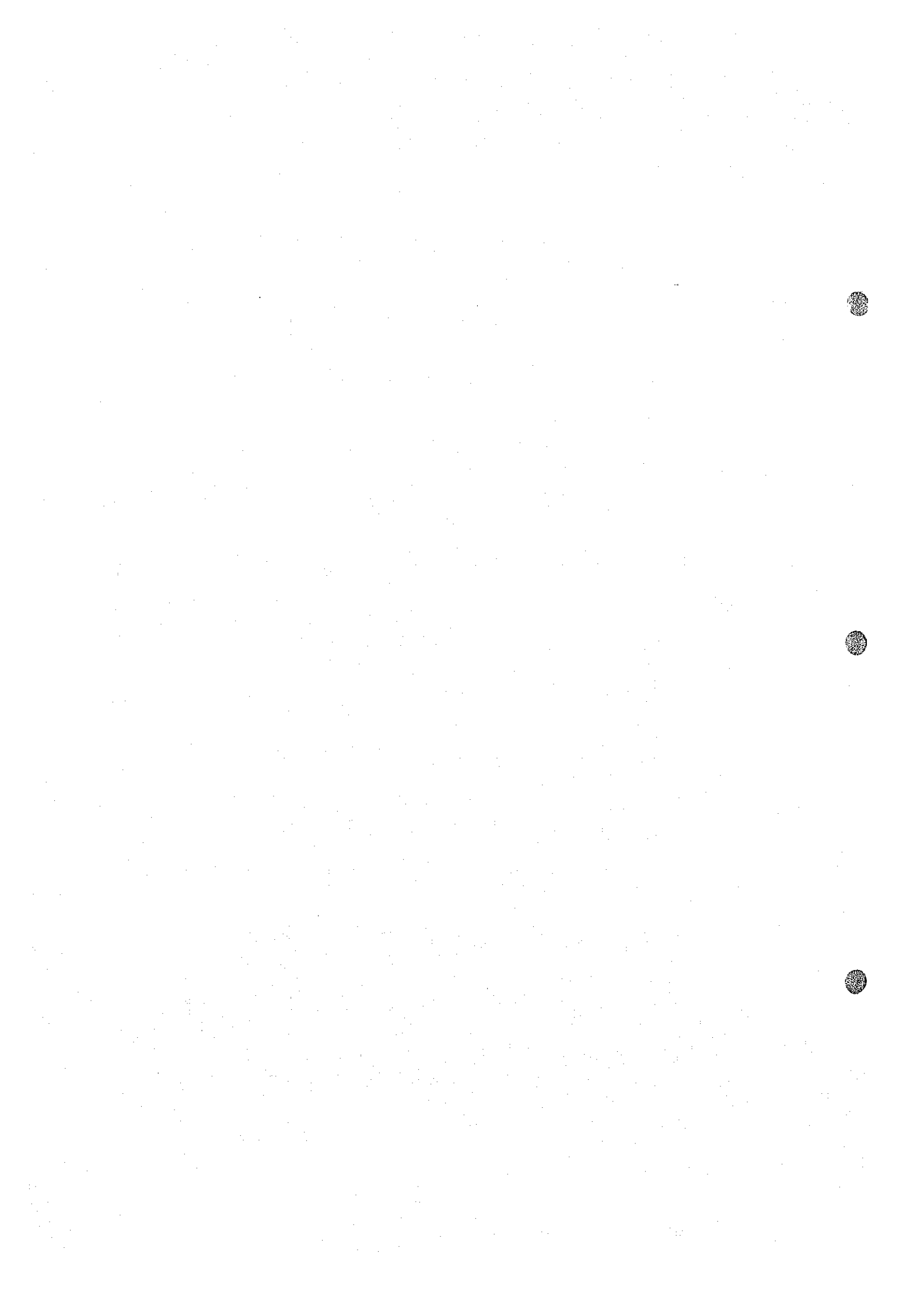
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	27.2	52.6	18.7	56.6	15.8	15.2	95.6	124.3	117.4	62.8	13.4	13.7	613.3
1963	18.1	19.4	10.5	80.9	39.4	150.5	284.8	93.0	33.9	25.7	24.9	24.0	805.1
1964	23.1	19.8	13.7	205.0	41.7	14.2	245.4	178.9	245.0	54.1	11.8	7.3	1,060.0
1965	13.1	7.6	0.6	43.1	14.4	8.6	260.8	118.8	26.0	21.7	46.4	18.5	579.6
1966	11.8	7.2	87.4	9.8	19.2	6.7	531.4	164.4	151.1	23.3	20.9	5.5	1,038.7
1967	14.8	28.3	56.5	74.6	37.0	3.2	93.0	113.9	88.1	29.9	22.8	27.2	589.3
1968	6.2	3.1	14.8	20.6	7.5	16.2	125.4	118.8	78.2	45.0	62.6	19.4	517.8
1969	8.2	53.9	53.7	79.0	119.8	19.3	58.1	421.3	198.5	42.9	7.3	5.1	1,067.1
1970	4.0	16.7	3.7	10.3	18.7	13.7	323.0	87.7	260.1	91.5	34.6	29.9	893.9
1971	12.7	7.9	66.0	59.2	69.5	17.2	357.2	168.7	90.9	38.3	16.7	18.6	922.9
1972	17.7	24.3	48.4	66.9	56.5	24.3	33.8	359.1	131.1	149.8	89.8	130.5	1,132.2
1973	195.1	162.1	144.5	157.3	152.1	106.1	184.4	174.0	188.1	141.2	112.5	89.3	1,806.7
1974	71.5	47.6	1.8	220.9	309.8	90.3	233.6	133.9	79.2	48.4	27.4	16.6	1,281.0
1975	14.3	16.9	32.0	98.6	111.7	4.0	203.5	157.6	42.1	57.5	63.8	69.6	871.6
1976	5.8	50.6	0.6	58.4	55.7	24.0	82.0	352.7	88.2	100.3	83.1	86.2.	987.6
Total	443.6	518.0	552.9	1,241.2	1,068.8	513.5	3,112.0	2,767.1	1,817.9	932.4	638.0	561.4	14,166.8
Mean	29.6	34.5	36.9	82.7	71.3	34.2	207.5	184.5	121.2	62.2	42.5	37.4	944.5

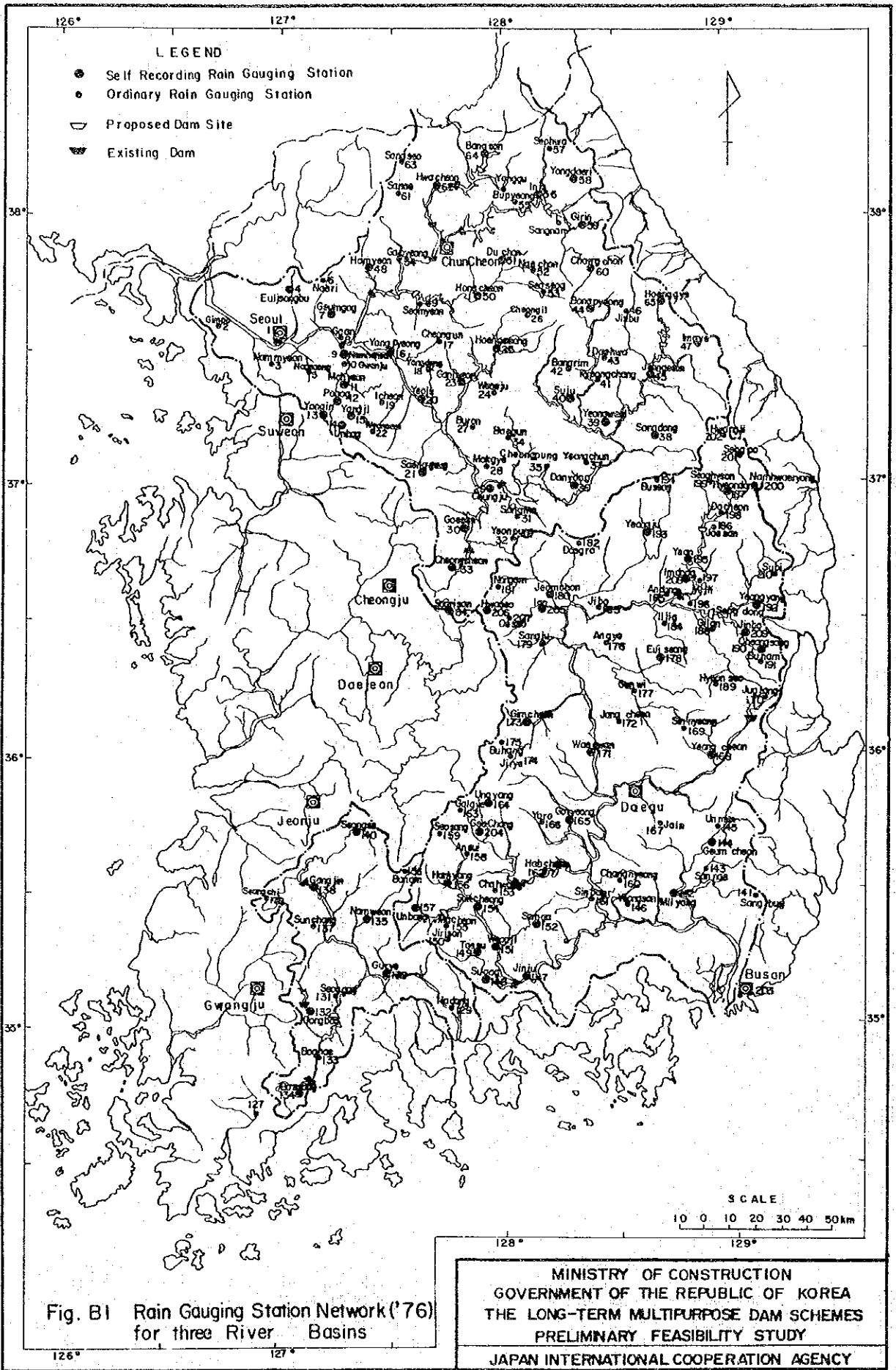
Table B 31 ESTIMATED MONTHLY RUN-OFF AT JUAM DAMSITE

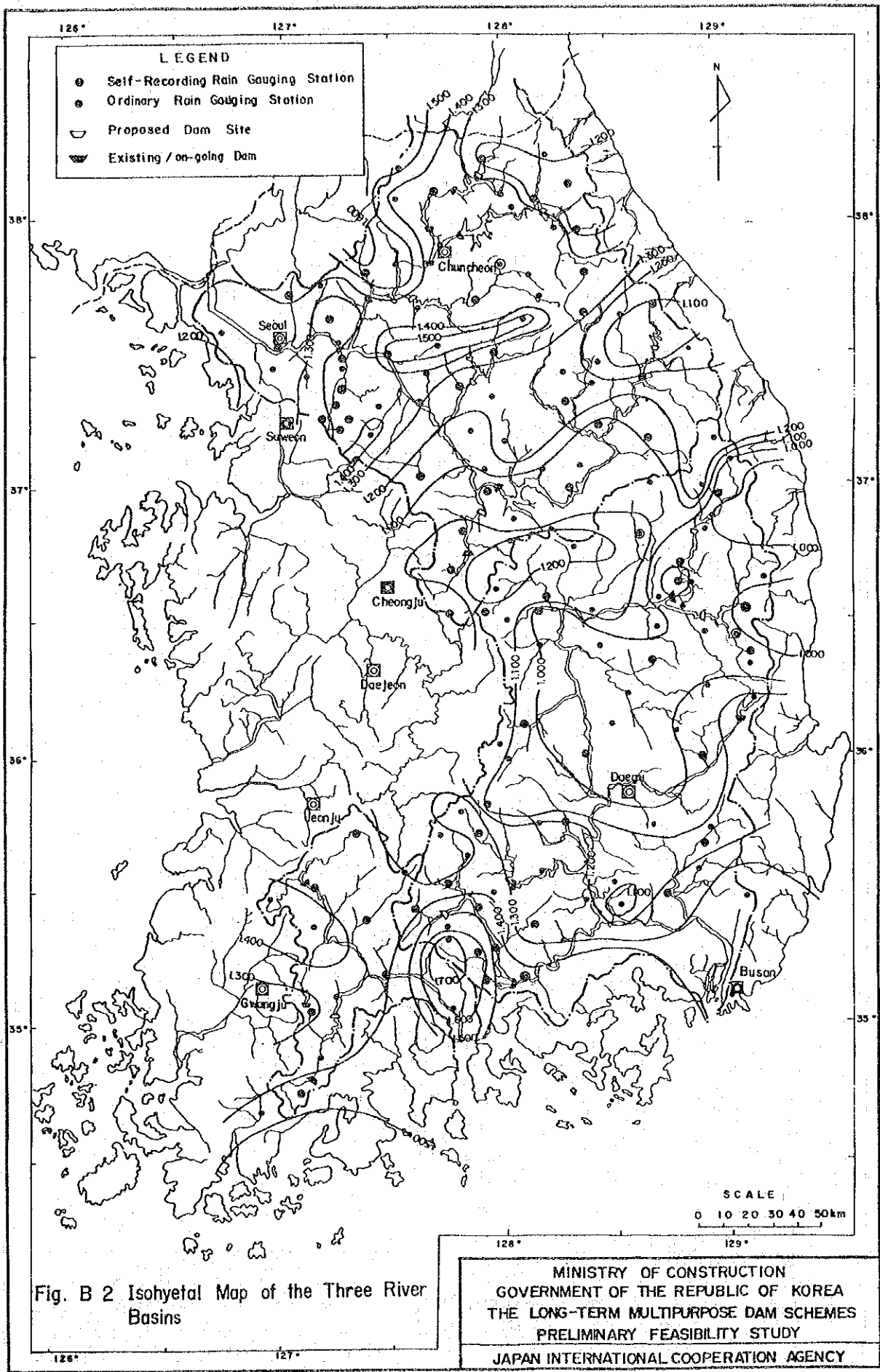
Unit: 10⁶ m³

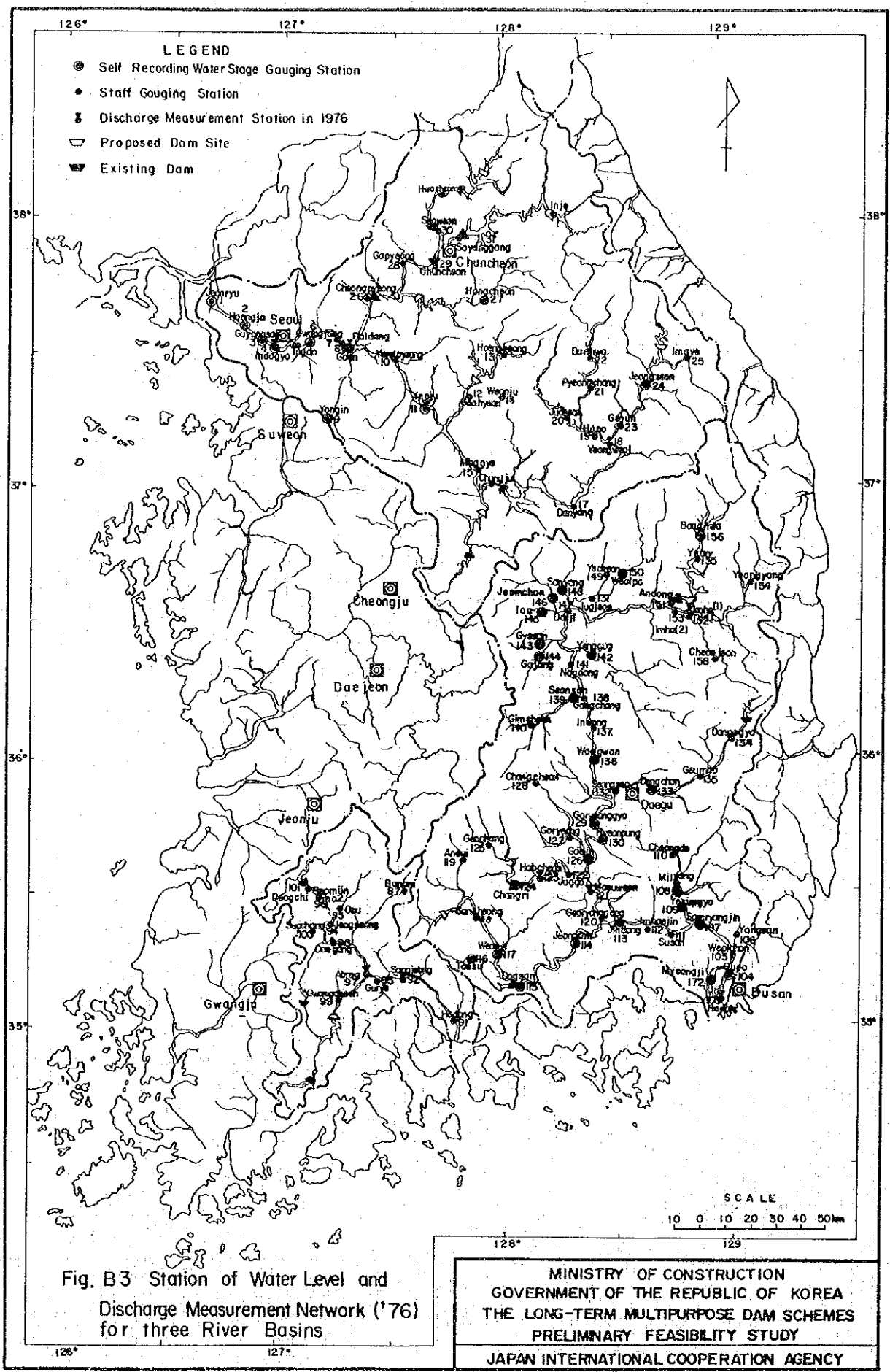
Catchment Area: 1,010 km²

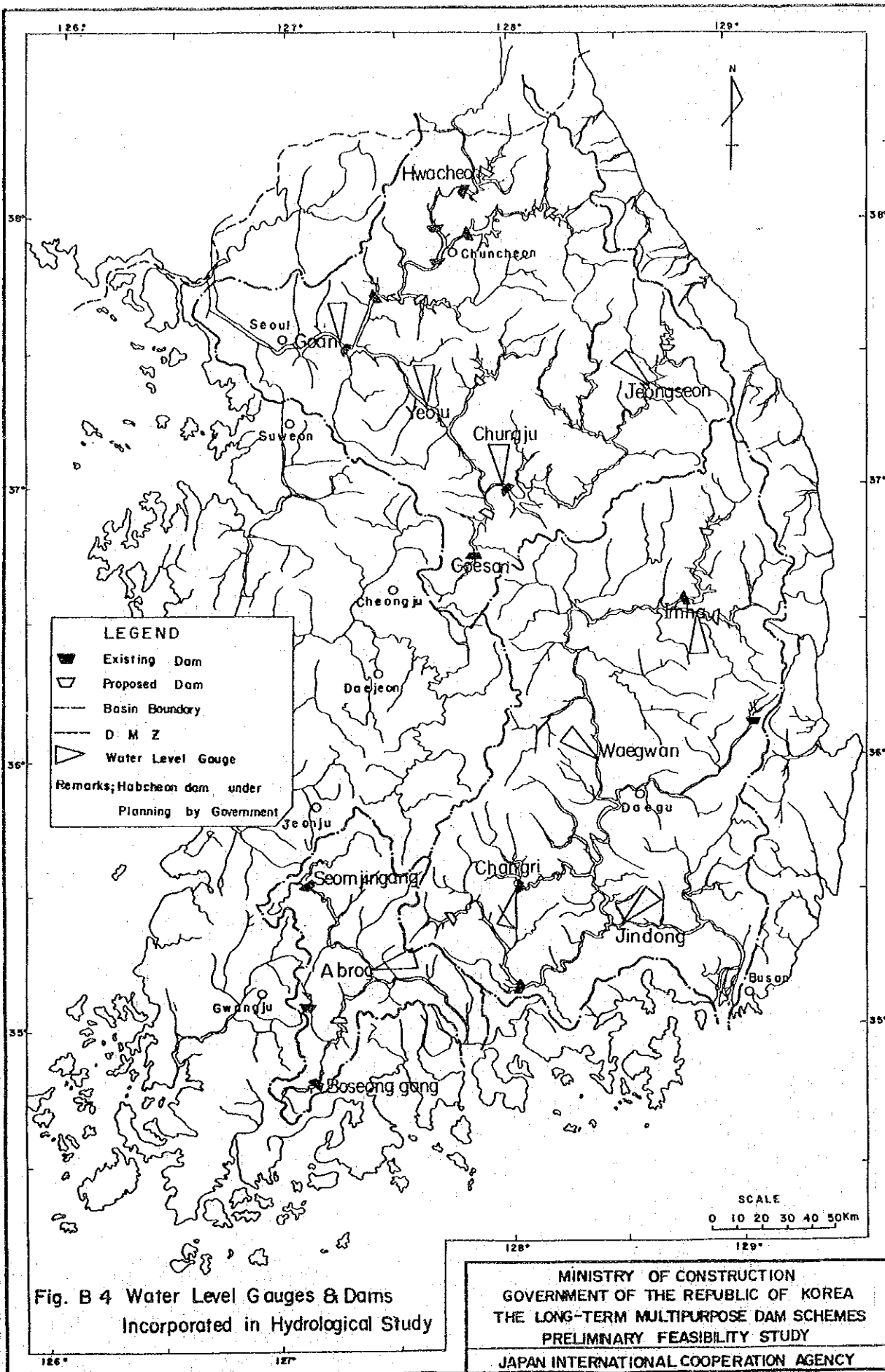
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1962	3.9	6.0	2.2	59.2	1.1	11.9	133.5	234.8	321.7	19.9	10.9	6.0	811.1
1963	5.6	9.6	10.8	59.8	82.7	163.0	323.2	19.0	8.8	7.2	4.3	2.0	696.7
1964	1.6	28.4	17.3	134.5	63.5	9.8	221.9	72.8	171.3	11.3	6.5	4.3	743.2
1965	7.3	14.7	9.2	8.9	13.6	2.3	321.5	61.2	8.7	5.0	25.7	6.3	484.4
1966	4.4	11.6	100.6	33.5	35.0	16.1	139.9	251.3	93.3	16.3	10.9	7.4	720.3
1967	6.3	8.6	12.9	35.3	5.9	29.1	111.1	3.3	8.4	3.2	10.6	9.1	243.8
1968	3.9	3.8	16.9	16.7	3.1	3.1	4.2	91.4	7.9	51.0	10.2	7.9	220.1
1969	11.6	32.2	8.7	80.4	60.8	2.3	199.3	332.4	361.6	28.6	4.6	7.5	1,130.0
1970	8.9	11.1	11.2	26.1	31.4	32.3	338.3	122.5	283.3	45.5	45.5	13.8	969.9
1971	46.6	24.9	16.0	11.7	10.0	104.0	289.5	143.2	52.0	14.7	10.8	8.9	732.3
1972	16.8	19.1	110.3	46.5	95.8	7.3	413.0	328.4	47.3	15.4	42.6	31.0	1,173.5
1973	39.3	18.0	12.7	81.9	211.6	4.5	57.2	102.4	76.0	22.2	12.9	8.9	647.6
1974	6.3	13.7	22.1	56.6	203.3	60.7	319.8	158.0	47.7	42.3	9.8	12.7	953.0
1975	5.9	4.5	11.7	82.4	40.9	26.0	250.1	103.8	58.5	32.1	9.1	9.0	634.0
1976	6.9	35.2	18.2	20.1	33.1	166.3	11.5	35.6	11.4	5.3	7.3	10.1	361.0
Total	175.3	241.4	380.8	753.6	891.8	638.7	3,134.7	2,060.1	1,557.9	320.0	221.7	144.9	10,520.9
Mean	11.7	16.1	25.4	50.2	59.5	42.6	209.0	137.3	103.9	21.3	14.8	9.7	701.4











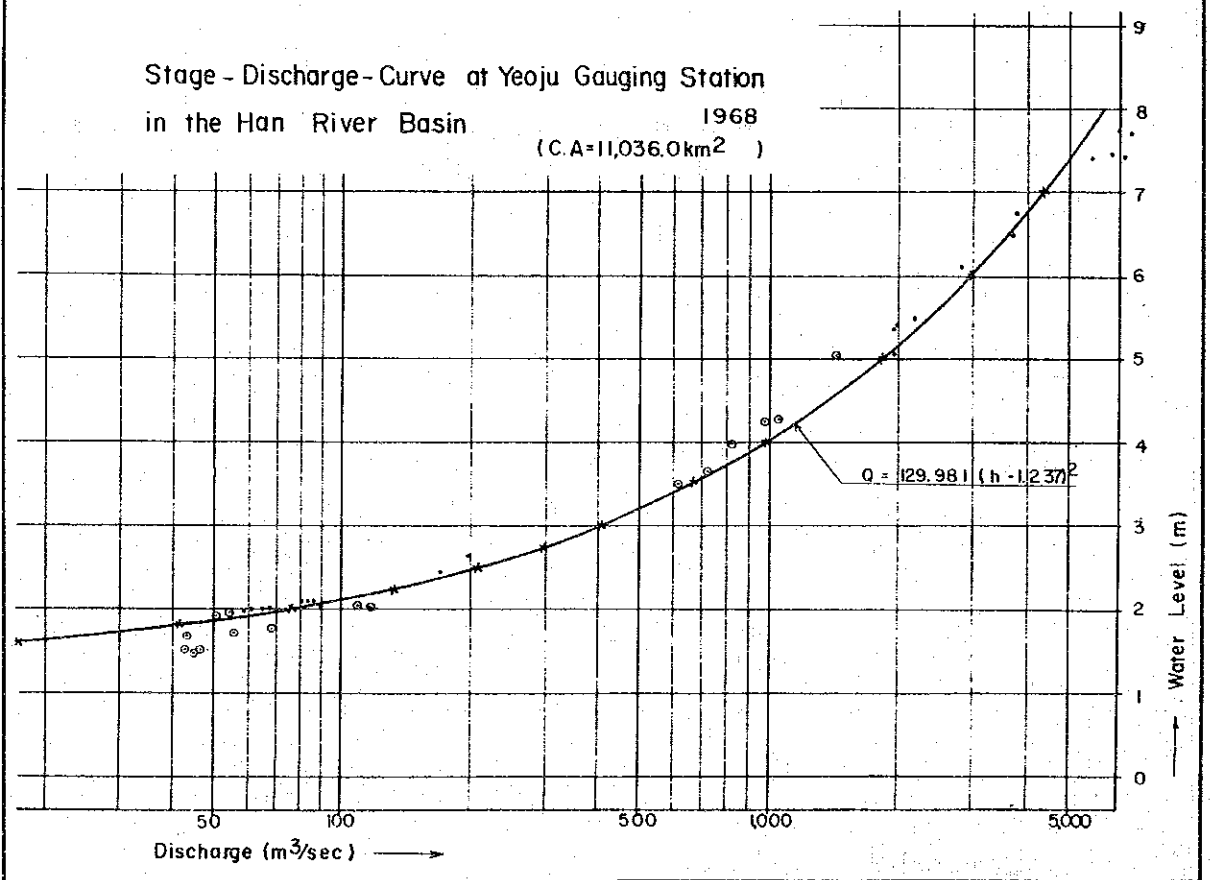
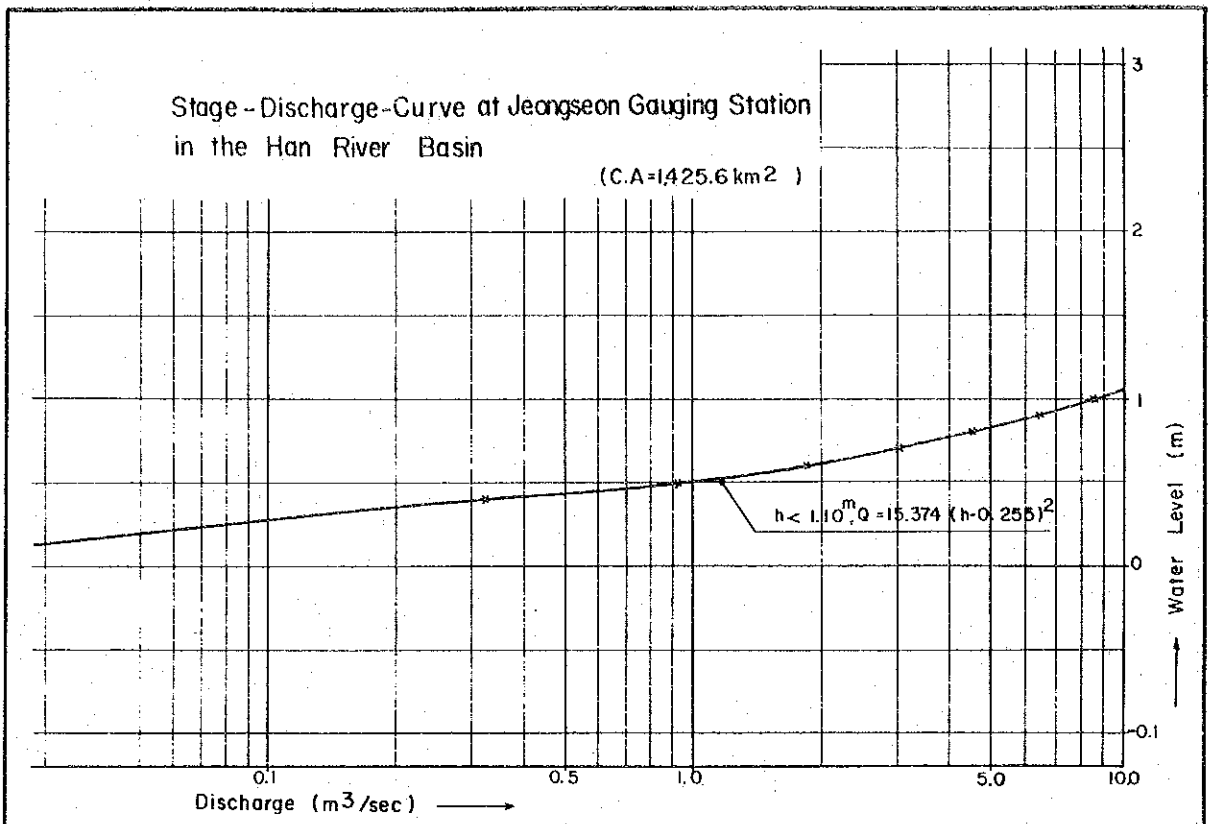
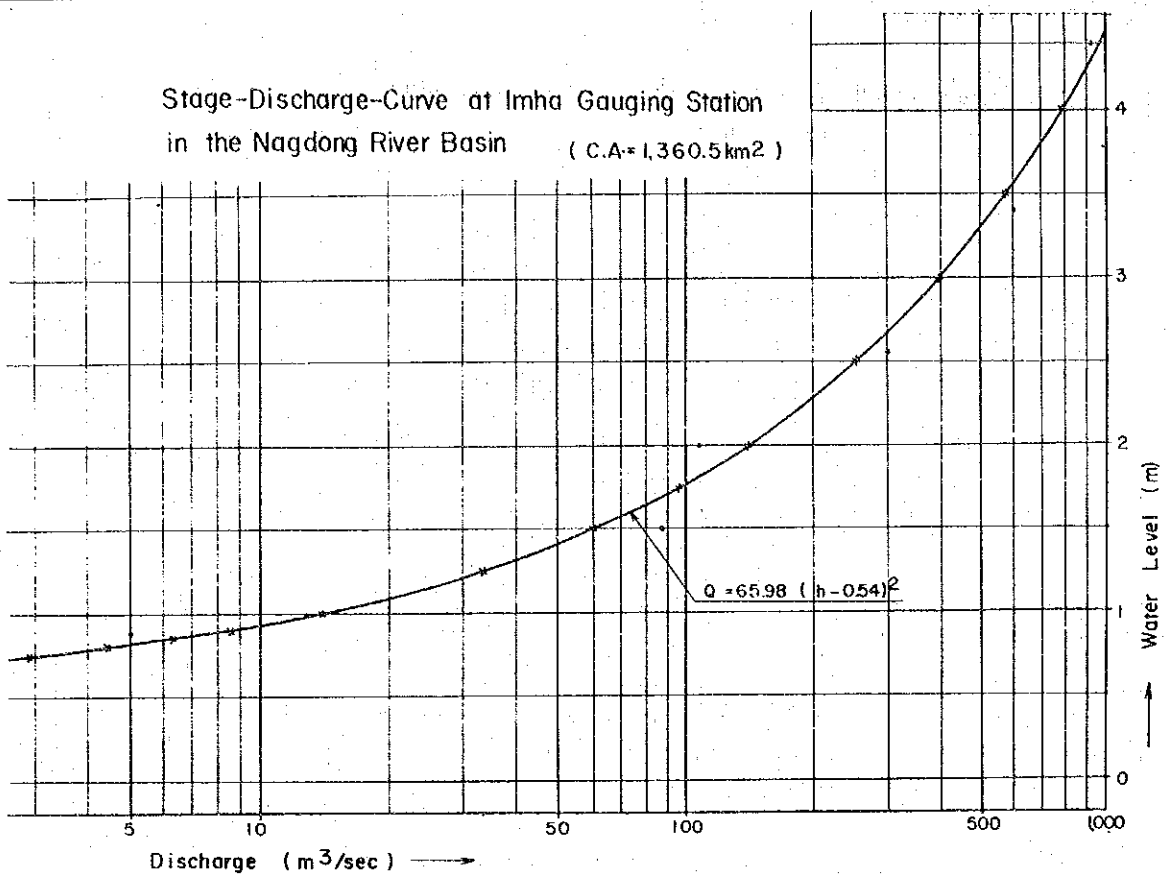


Fig. B5 Stage-Discharge - Curve

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Stage-Discharge-Curve at Imha Gauging Station
in the Nagdong River Basin (C.A.= 1,360.5 km²)



Stage-Discharge-Curve at Waegwan Gauging Station
in the Nagdong River Basin (C.A.= 11,074.4 km²)

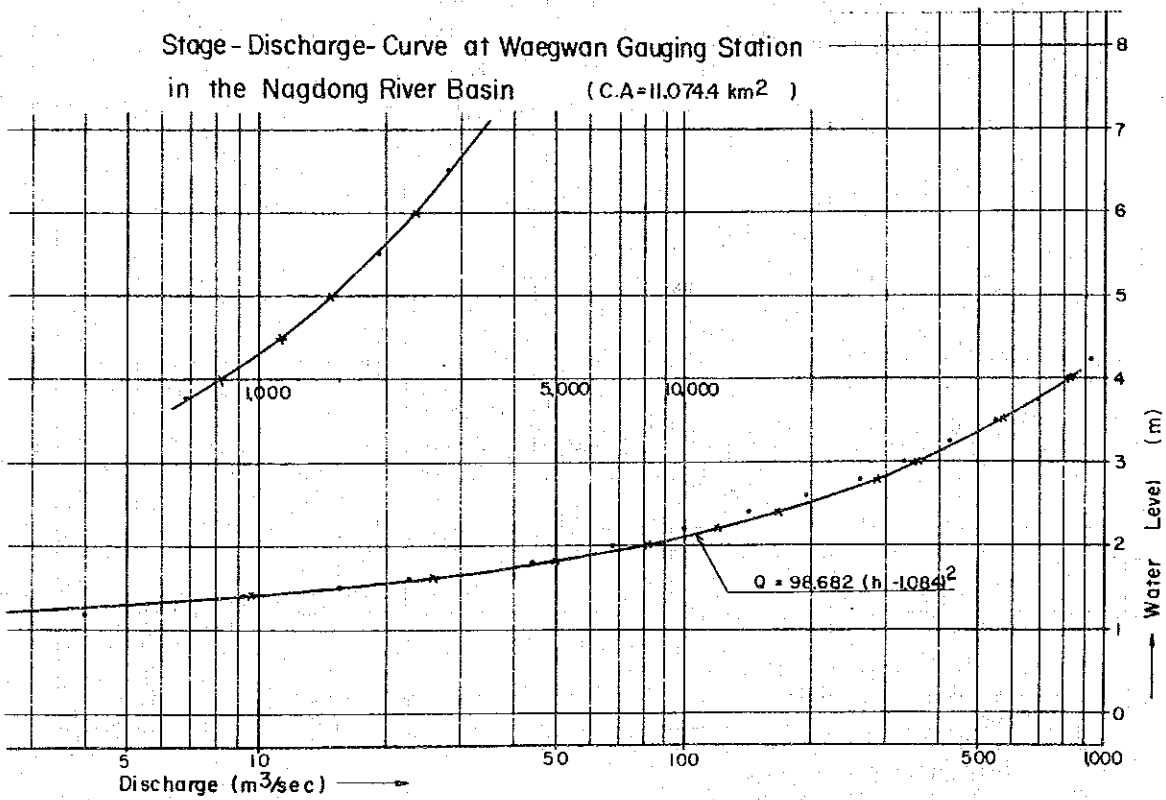


Fig. B5 Continued (2)

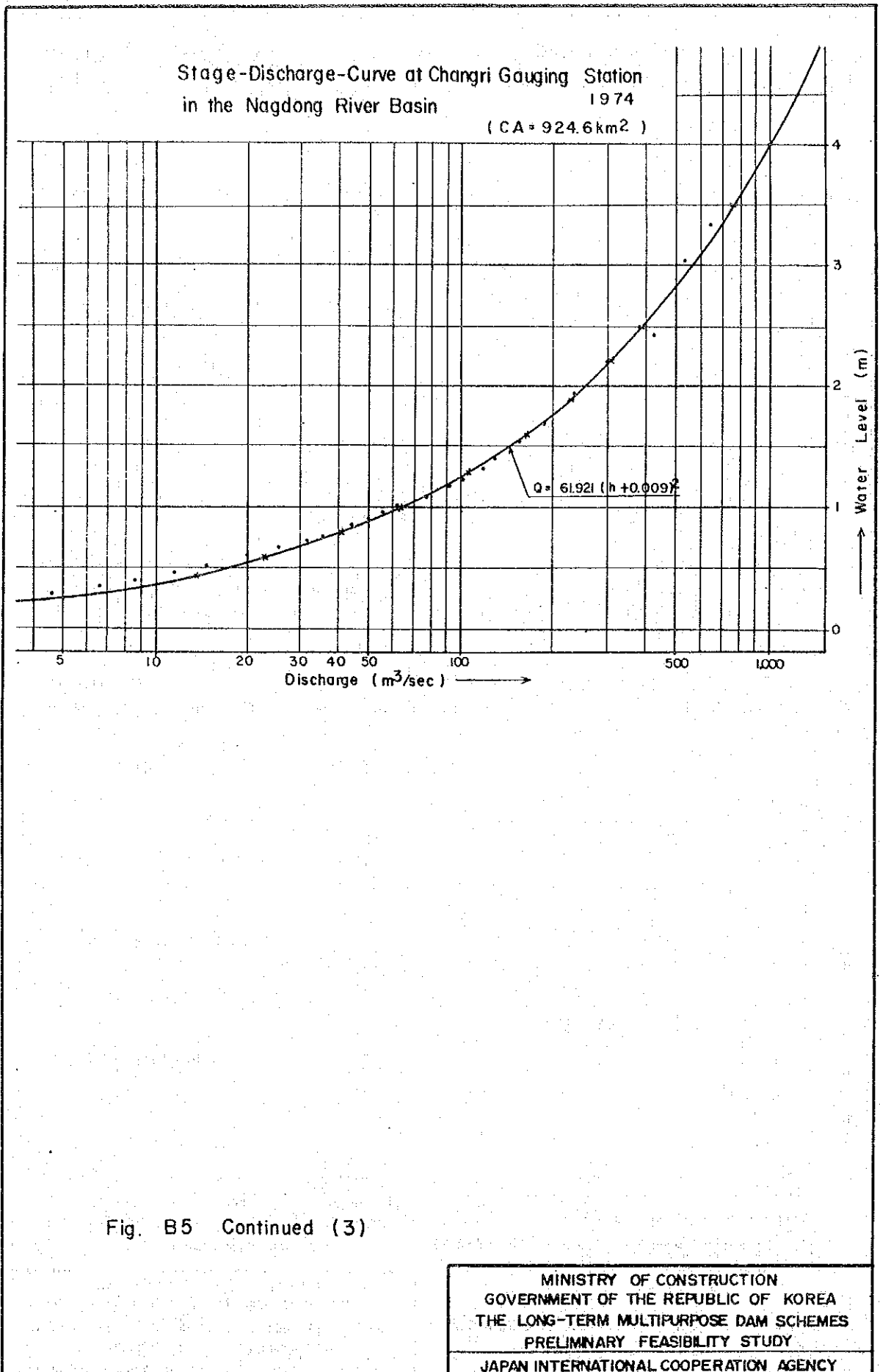
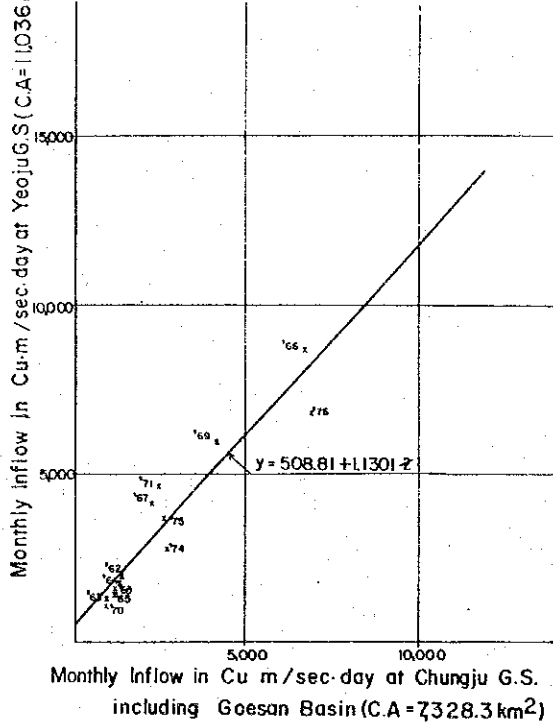


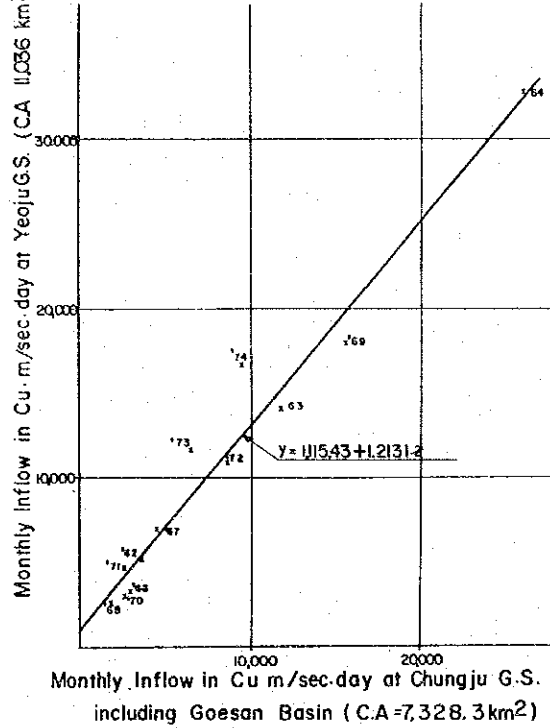
Fig. B5 Continued (3)

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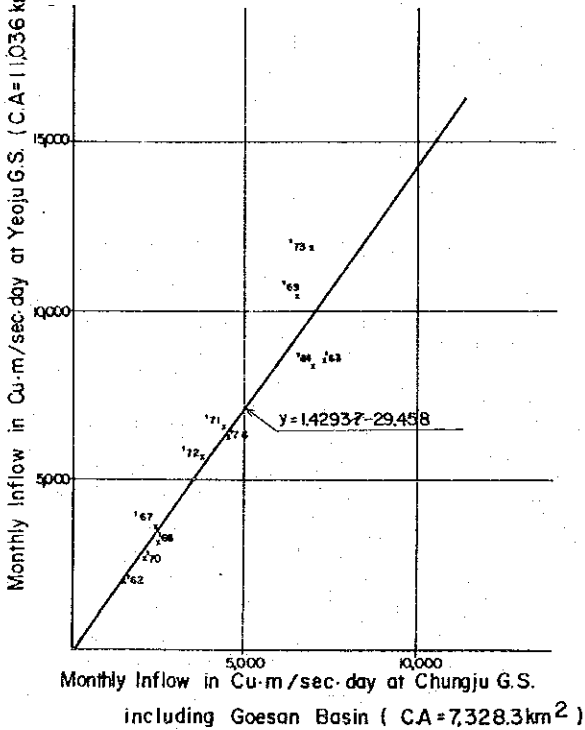
Correlation of Monthly Inflow (Mar) between
Yeosu G.S and Chungju G.S. including Goesan Basin



Correlation of Monthly Inflow (Apr) between
Yeosu G.S. and Chungju G.S. including Goesan Basin



Correlation of Monthly Inflow (May) between
Yeosu G.S. and Chungju G.S. including Goesan Basin



Correlation of Monthly Inflow (June) between
Yeosu G.S. and Chungju G.S. including Goesan Basin

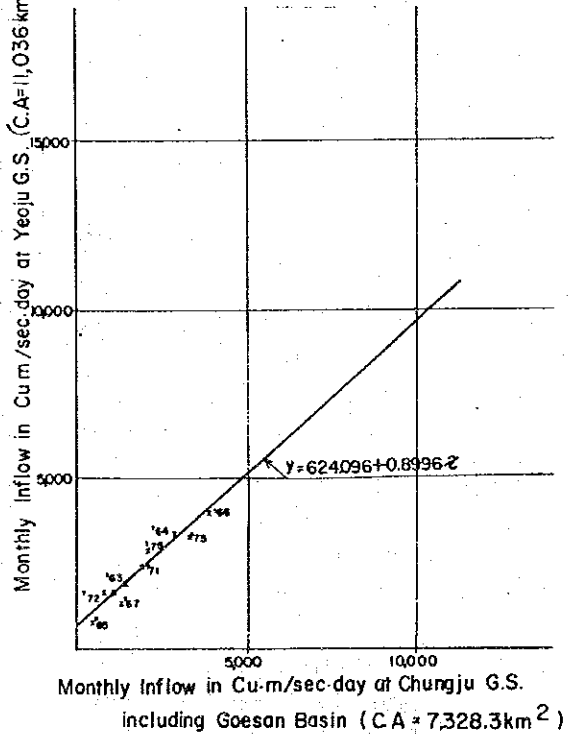
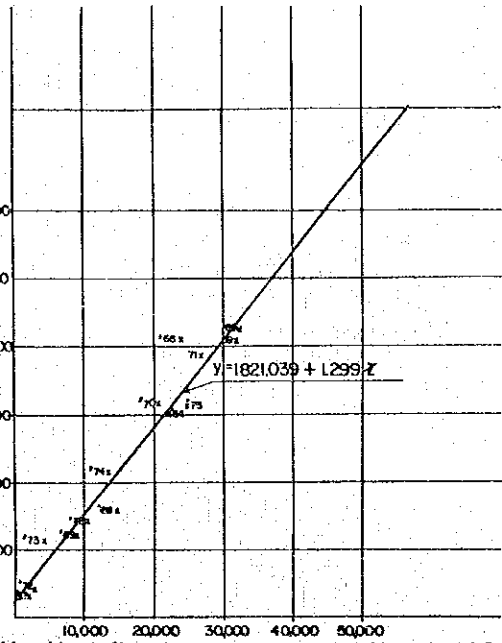


Fig. B6 Correlation of Annual and Monthly Run-off

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Monthly Inflow in Cu m/sec-day at Yeosu G.S. (C.A = 11,036km²)

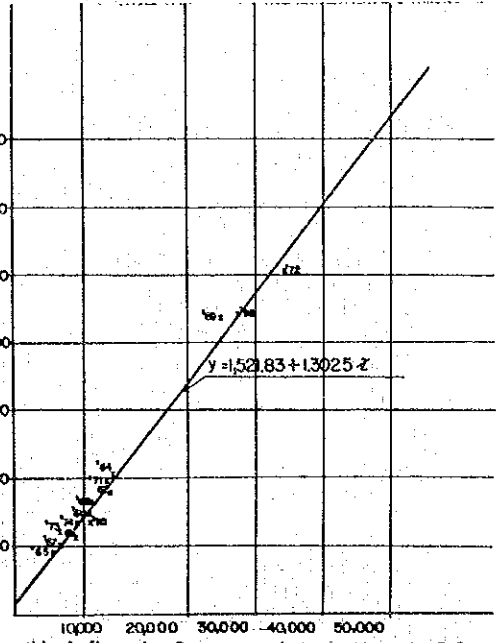
Correlation of Monthly Inflow (July) between Yeosu G.S. and Chungju G.S. including Goesan Basin.



Monthly Inflow in Cu-m/sec-day at Chungju G.S. including Goesan Basin (C.A=7,328.3 km²)

Monthly Inflow in Cu m/sec-day at Yeosu G.S. (C.A = 11,036km²)

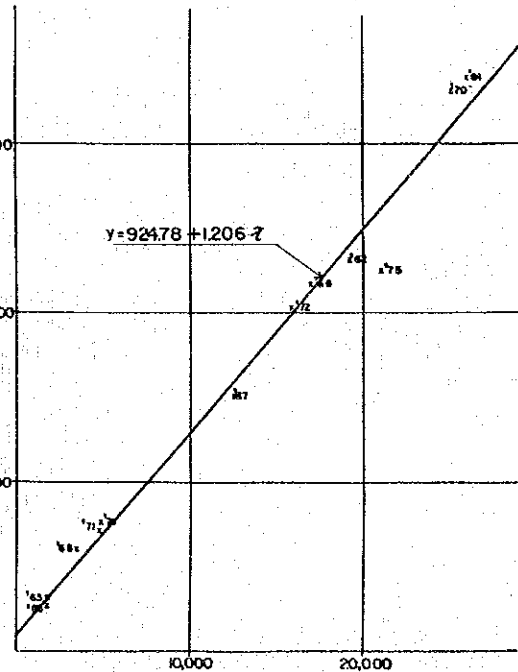
Correlation of Monthly Inflow (Aug.) between Yeosu G.S. and Chungju G.S. including Goesan Basin



Monthly Inflow in Cu-m/sec-day at Chungju G.S. including Goesan Basin (C.A = 7,328.3km²)

Monthly Inflow in Cu m/sec-day at Yeosu G.S. (C.A=11,036km²)

Correlation of Monthly Inflow (Sep.) between Yeosu G.S. and Chungju G.S. including Goesan Basin.



Monthly Inflow in Cu-m/sec-day at Chungju G.S. including Goesan Basin (C.A=7,328.3 km²)

Correlation between Annual Inflow and Annual Precipitation at Changri G.S.

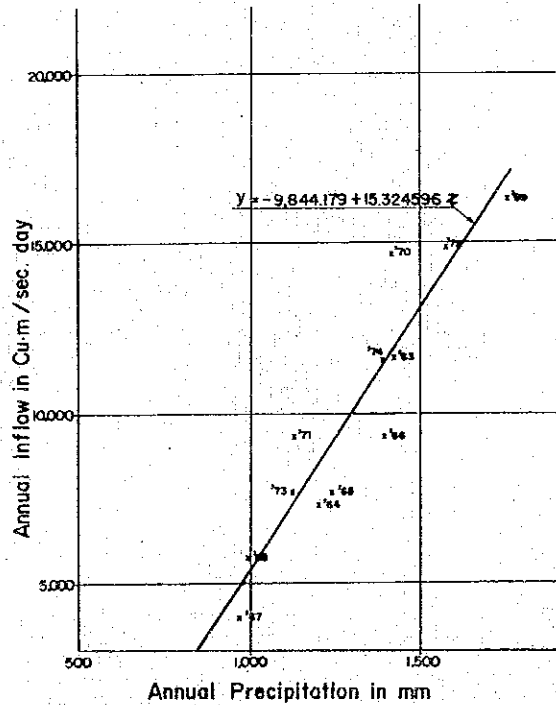


Fig. B 6 Continued (2)

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