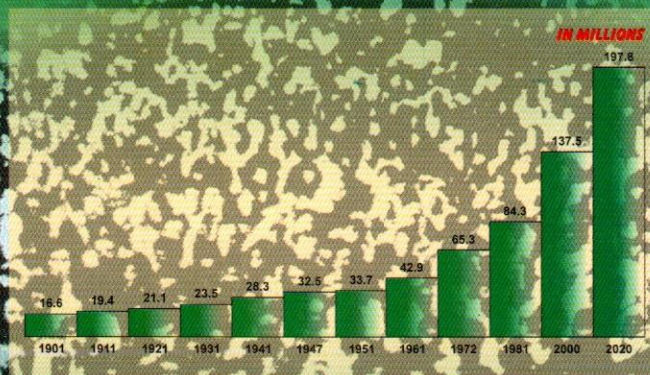


POPULATION GROWTH AND ITS IMPLICATIONS



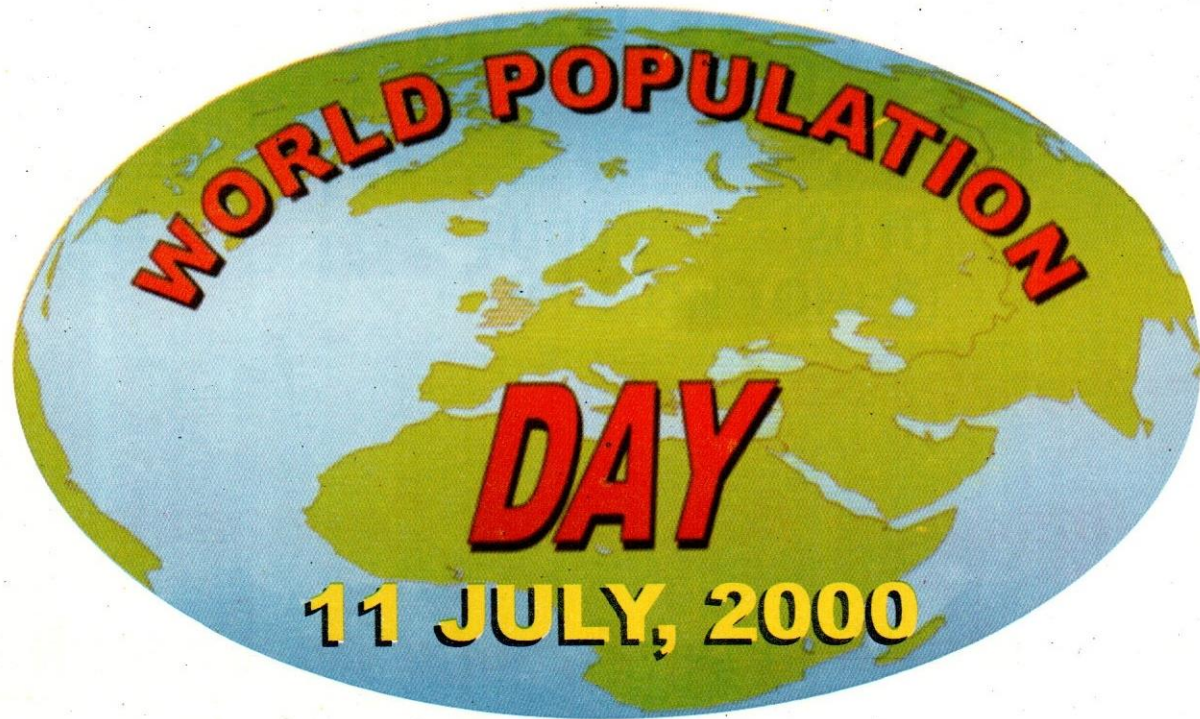
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CONTENTS

- ***Population Profile***
- ***Impact of Population Programme***
- ***Implications of Population Growth***

POPULATION

PROFILE

TECHNICAL NOTE

How Population Grows?

World

$B - D$ in a year per 1000 Population

Suppose $40 - 10 = 3.0$ percent growth rate per annum

Country:

$B - D + Im - Em$

Province or District within each country:

$B - D + Im - Em + In - Out$

Urban Area within each country:

$B - D + Im - Em + In - Out + Expansion$

Suppose the population grows at 3 percent per annum, what does it mean?

It means the population would double in 70 years. How?

The formula is very simple: Just divide 70 years by the rate of growth: $70 / 3 = 23$ years

It may be called the **Law of Seventy**

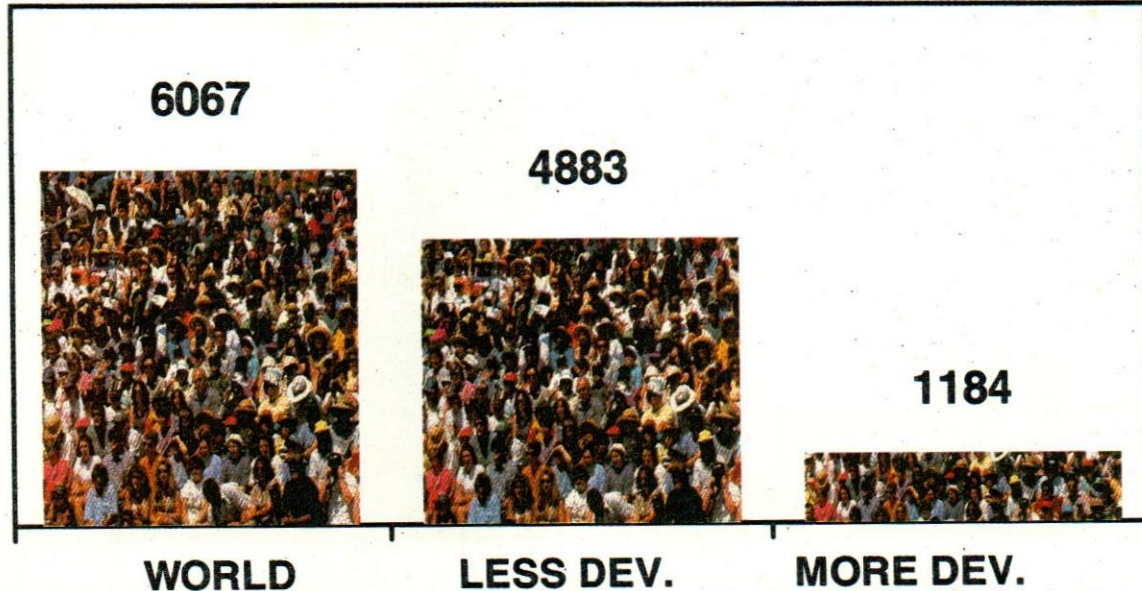
Note:

$B =$ Births
 $Im =$ Immigration

$D =$ Deaths
 $Em =$ Emigration

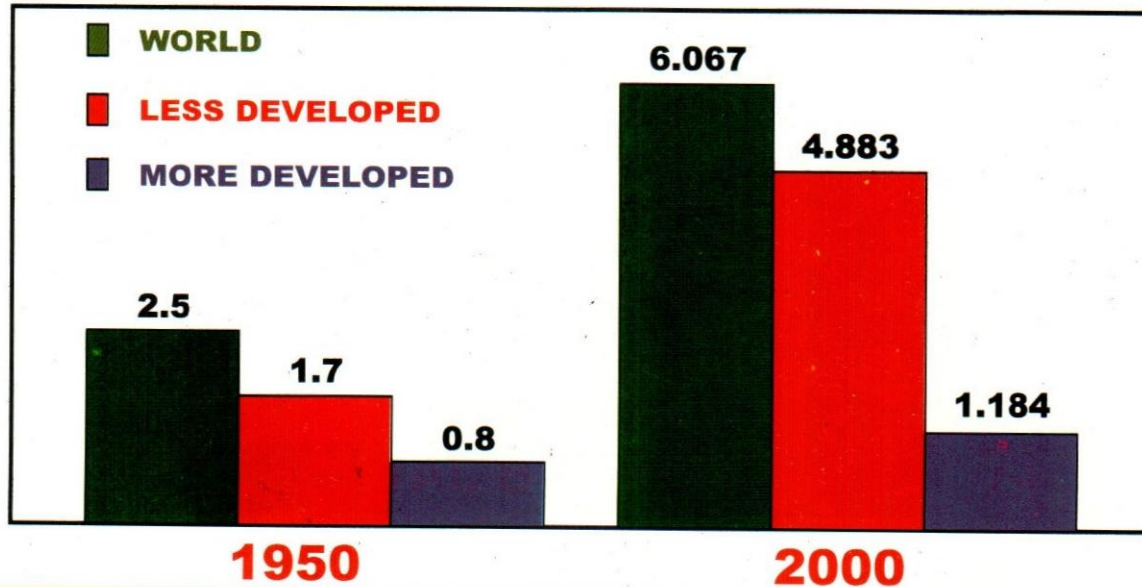
POPULATION 2000

IN MILLIONS



POPULATION TRENDS

IN BILLIONS



TIME TAKEN TO ADD ONE BILLION

YEAR	WORLD POPULATION	YEARS
1804	1	---
1927	2	123
1960	3	33
1974	4	13
1987	5	12
1999	6	12

POPULATION AND GNP/CAPITA

REGIONS	POPULATION (MILLION) 2000	GNP/ CAPITA (\$) 1998
WORLD	6067	4,890
MORE DEVELOPED	1184	19,480
LESS DEVELOPED	4883	1,260

PAKISTAN

SHARE OF THE WORLD 2000

AREA

(0.796) **0.6%**
(Million Sq. Km)

POPULATION

(137.5) **2.3%**
(Million)

POPULATION, RATE OF GROWTH AND DOUBLING TIME, 2000

REGIONS/ COUNTRIES	POPULATION (MILLION)	GROWTH RATE (PERCENT)	DOUBLING TIME (YEARS)
WORLD	6067	1.4	50
MORE DEVELOPED	1184	0.1	700
LESS DEVELOPED	4883	1.7	41
PAKISTAN	137.5	2.2	32
BANGLADESH	128	1.8	39
CHINA	1267	0.9	78
INDIA	1003	1.8	39
SOUTH KOREA	47.5	0.9	78

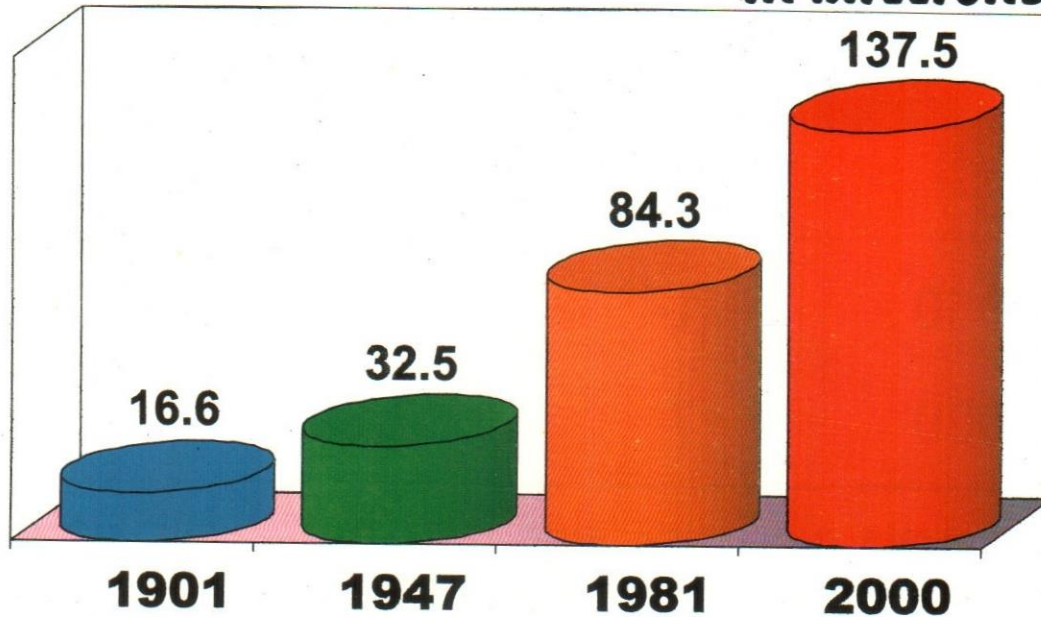
PAKISTAN'S POPULATION RANK ORDER IN THE WORLD

YEAR	RANK	POPULATION (Million)
1950	14	33.0
2000	7*	137.5

* AFTER CHINA, INDIA, USA, INDONESIA, BRAZIL AND RUSSIA
HAVING SURPASSED JAPAN, BANGLADESH, NIGERIA, ETC.

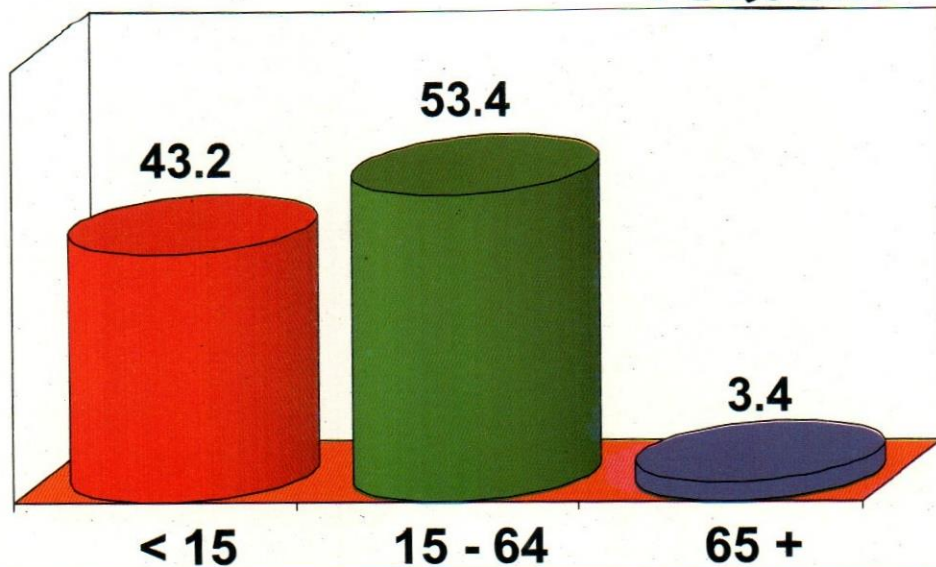
POPULATION SIZE OF PAKISTAN

IN MILLIONS

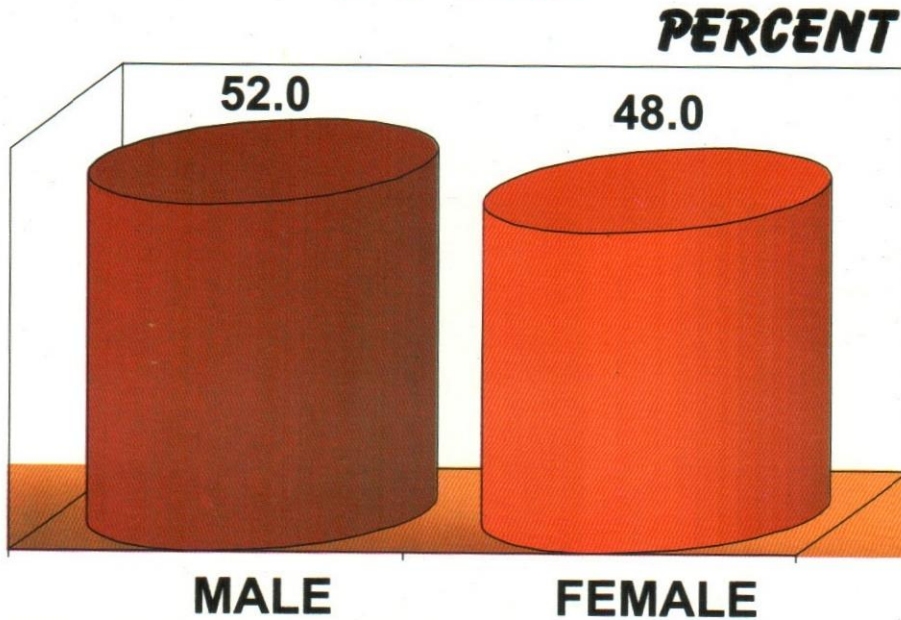


POPULATION DISTRIBUTION BY AGE

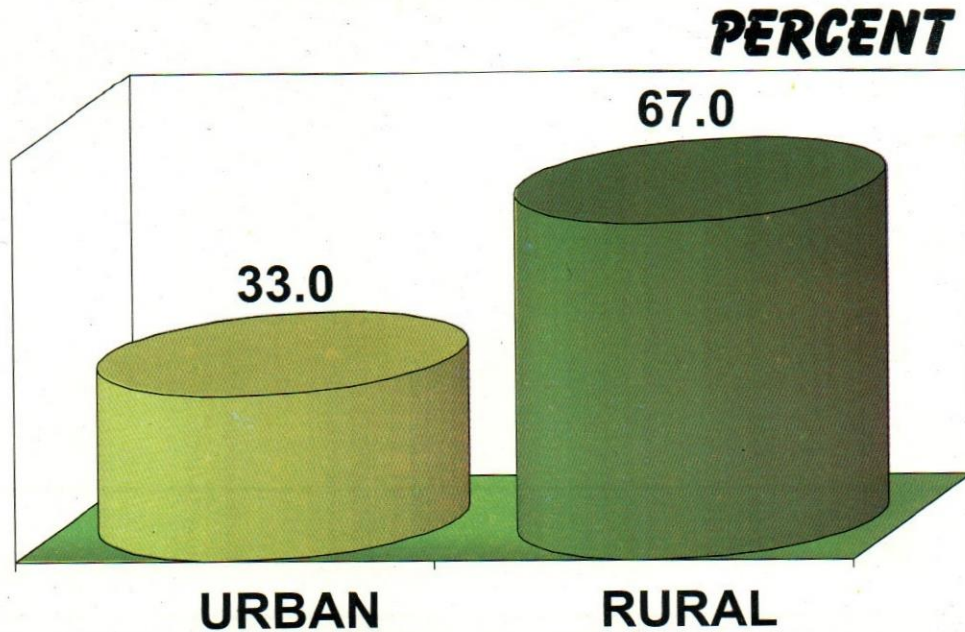
PERCENT



POPULATION DISTRIBUTION BY SEX



POPULATION DISTRIBUTION BY PLACE OF RESIDENCE



POPULATION GROWTH RATE

<u>PERIOD</u>	<u>GR (%)</u>
• 1951 - 61	2.45
• 1961 - 72	3.66
• 1972 - 81	3.05
• 1981 - 98	2.61
• 2000	2.2

BIRTHS DURING 1999

- IN ONE YEAR 4,400,000
- PER MONTH 366,667
- PER DAY 12,055
- PER MINUTE 8 ←

DEATHS DURING 1999

- IN ONE YEAR 1,237,500
- PER MONTH 103,125
- PER DAY 3,390
- PER MINUTE 2 ←

NET ADDITION DURING 1999

- IN ONE YEAR 3,162,500
- PER MONTH 263,542
- PER DAY 8,665
- PER MINUTE 6 ←

**. . . . the addition of 3.16
million means adding the
population of:**

ALBANIA

OR

NEWZEALAND

OR

FAISALABAD + MULTAN

IMPACT OF POPULATION PROGRAMME

POPULATION WELFARE SERVICE OUTLETS 1991 - 2000

TYPE OF OUTLETS	1991	2000
F AMILY W ELFARE C ENTRES	1290	1688
R EPRODUCTIVE H EALTH S ERVICE C ENTRES	79	106
M OBILE S ERVICE U NITS	130	131
V ILLAGE B ASED F P W ORKERS	----	13084
R EGISTERED M EDICAL P RACTITIONERS	2500	21040

POPULATION PARAMETERS (1991 AND 2000)

PARAMETER	1991	2000
KNOWLEDGE (%)	78	97
USE OF CONTRACEPTIVES (%)	12	30
TOTAL FERTILITY RATE	5.4	4.9

POPULATION GROWTH RATE (PGR) AND CONTRACEPTIVE PREVALENCE RATE (CPR), 2000

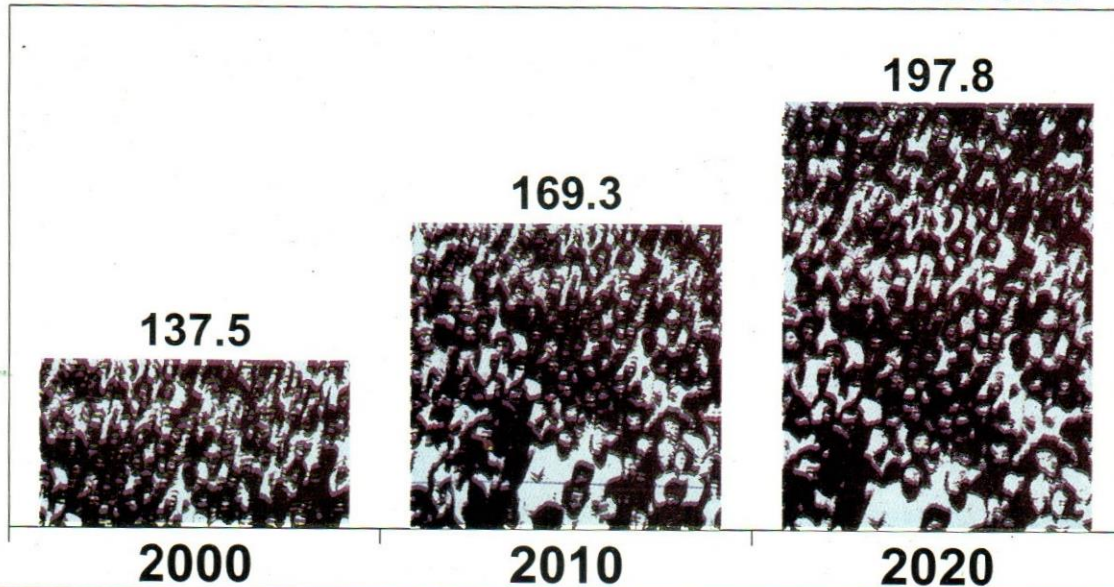
REGIONS	PGR (%)	CPR (%)
WORLD	1.4	60
MORE DEVELOPED	0.1	74
LESS DEVELOPED	1.7	56
ASIA	1.5	47

POPULATION GROWTH RATE (PGR) AND CONTRACEPTIVE PREVALENCE RATE (CPR)

MUSLIM COUNTRIES	PGR (%)	CPR (%)
INDONESIA	1.6	57
TURKEY	1.5	64
IRAN	1.4	73
BANGLADESH	1.8	49
EGYPT	2.0	55
MALAYSIA	2.1	48
PAKISTAN	2.2	30

PROJECTED POPULATION SCENARIO (2000 - 2020)

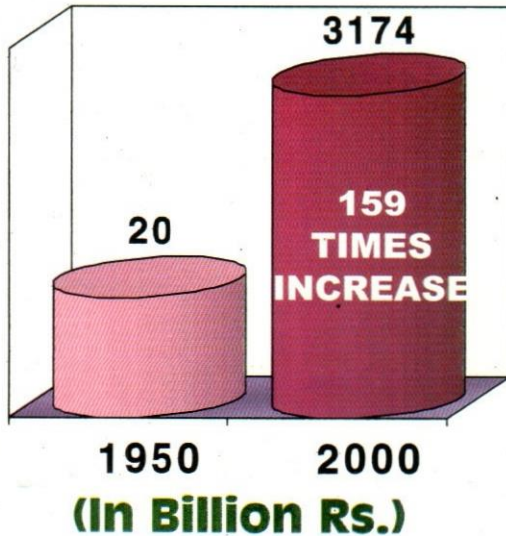
IN MILLIONS



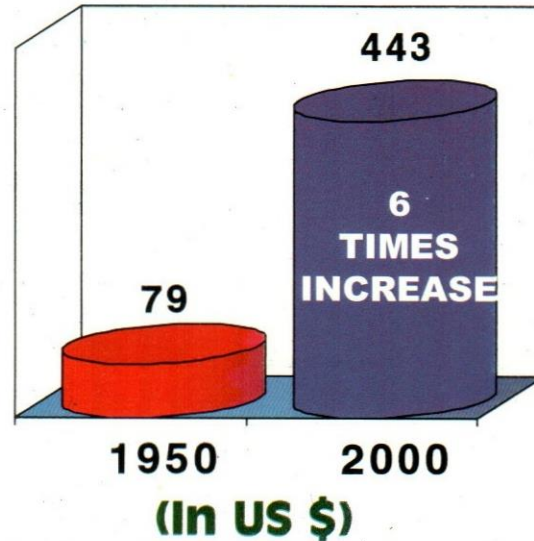
IMPLICATIONS OF POPULATION GROWTH

GDP AND PER CAPITA INCOME OF PAKISTAN 1950 - 2000

GDP



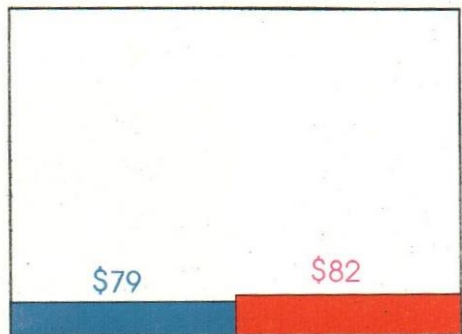
PER CAPITA



PER CAPITA INCOME OF PAKISTAN AND S. KOREA

1950 -2000

1950



PAKISTAN

S. KOREA

2000



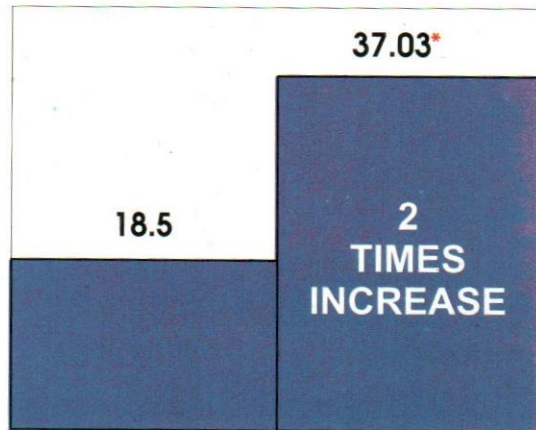
PAKISTAN

S. KOREA

POP.(M)	33	20	137.5	47.5
PGR (%)	1.8	3.0	2.2	0.9

EMPLOYMENT AND UNEMPLOYMENT (PERSONS IN MILLION)

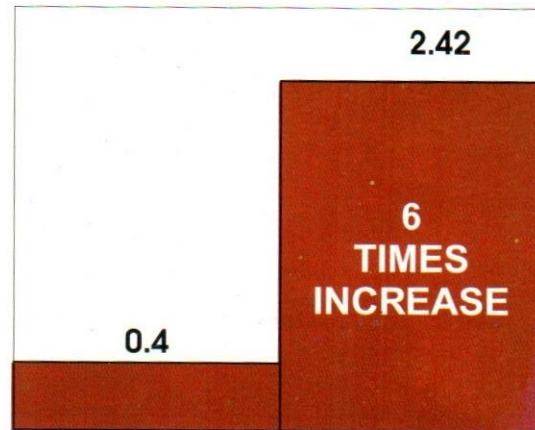
EMPLOYED



1970-71

1999-00

UNEMPLOYED

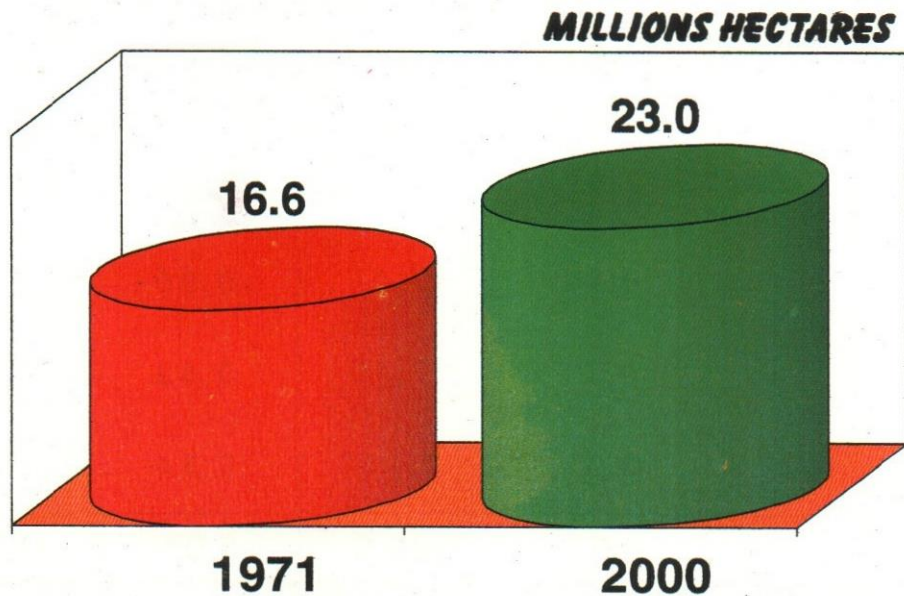


1970-71

1999-00

* OUT OF 37.03m EMPLOYED, ONLY 5m ARE FEMALE

LAND UNDER CULTIVATION 1971 - 2000



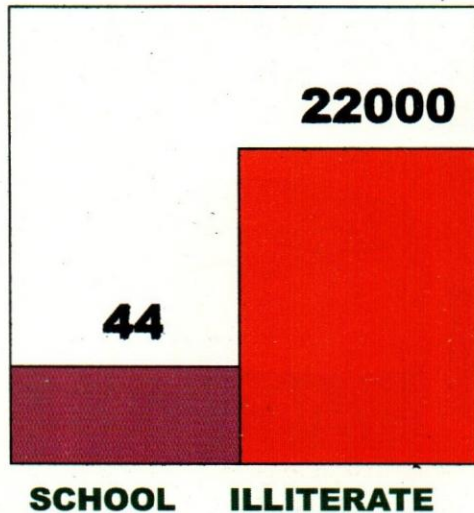
NUMBER OF PRIVATE FARMS BY SIZE

FARM SIZE (Acres)	1980		1990	
	NUMBER (Million)	%	NUMBER (Million)	%
Under 3 Acres	<u>2.07</u>	50.90	<u>3.25</u>	64.10
3 - 5	0.92	22.60	0.86	17.00
5 - 10	0.71	17.40	0.62	12.20
10 +	0.37	9.15	0.34	6.80
Total	4.07	100.0	5.07	100.0

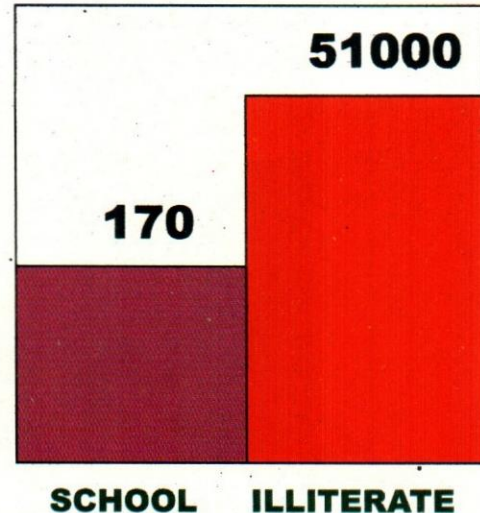
PRIMARY SCHOOLS AND ILLITERATE POPULATION 1961 - 2000

(In Thousand)

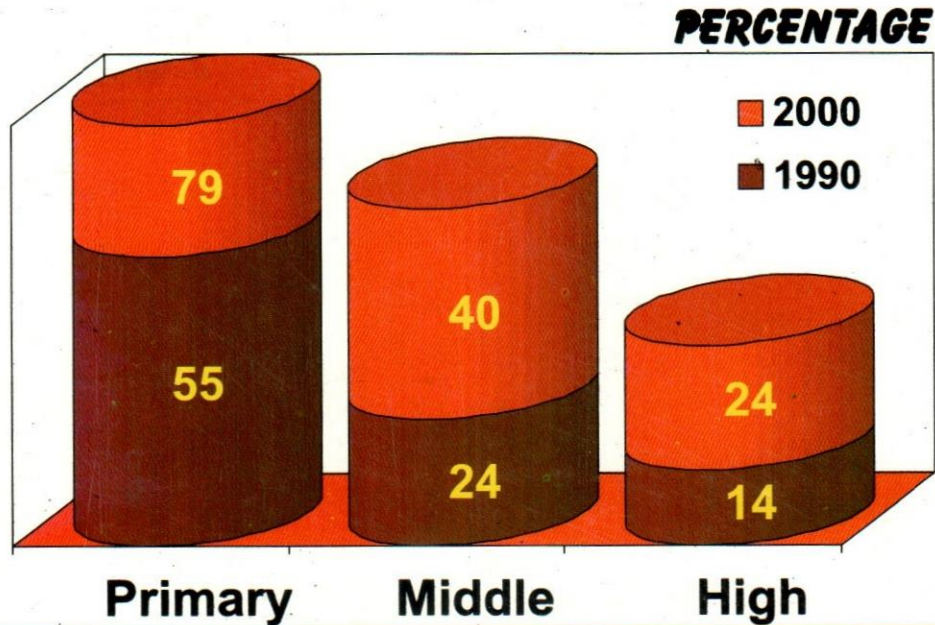
1961



2000



FEMALE PARTICIPATION RATE IN EDUCATION 1990 - 2000



HEALTH FACILITIES (1991 - 2000)

IN THOUSANDS

	1991	2000
HEALTH OUTLETS	10	12
DOCTORS	52	87
NURSES	17	36
HOSPITAL BEDS	73	92

CONTD...

POSITION IN 2000

- **POPULATION PER DOCTOR** **1,578**
- **POPULATION PER NURSE** **3,822**
- **POPULATION PER HOSPITAL BED** **1,495**
- **INFANT MORTALITY RATE** **89**
(PER 1000 BIRTHS)
- **MATERNAL MORTALITY RATE** **350**
(PER 100,000 BIRTHS)
- **DELIVERIES AT HOME (%)** **83**

MATERNAL AND INFANT MORTALITY RATES

REGIONS/ COUNTRIES	IMR	MMR
WORLD	57	460
MORE DEVELOPED	8	10
LESS DEVELOPED	62	500
PAKISTAN	89	350
BANGLADESH	82	850
EGYPT	52	170
INDONESIA	46	650
IRAN	26	120
TURKEY	43	180

OTHER HARD FACTS

(MILLION)

- **POPULATION LIVING BELOW POVERTY LINE** **45**
- **POPULATION WITH NO ACCESS TO SAFE DRINKING WATER** **40**
- **POPULATION WITH ONE ROOM HOUSES** **69**
- **POPULATION IN KATCHI ABADIES IN URBAN AREAS** **16**
- **POPULATION WITH NO SANITATION** **78**

REQUIREMENTS BY 2010

	2000	2010	NET REQ.
• HEALTH FACILITIES	12300	15357	3057
• PRIMARY SCHOOLS	170500	210209	39709
• HOUSING UNITS (M)	19.7	24.3	4.6
• EMPLOYMENT (M)	37.0	45.6	8.6
• GNP (BILLION RS.)	3120	3842	722
(Just to maintain present per capita)			

EXPECTED IMPORTS IN 2010

IMPORT	2000 (MILLION TONES)	2010
• TEA	0.083	0.102
• EDIBLE OIL	0.794	0.978
• PETROL/PETROLIUM PRODUCTS	11.690	14.393

SUMMARY IMPLICATIONS

SHORTAGE OF:

- EDUCATIONAL FACILITIES
- HEALTH SERVICES
- HOUSING UNITS
- FOOD
- LIVING SPACE
- ARABLE LAND
- CLEAN WATER

INCREASE IN:

- UNEMPLOYMENT
- LAND FRAGMENTATION
- IMPORT OF FOOD etc.
- ENVIRONMENTAL PROBLEMS
- CONGESTION IN HOUSEHOLDS
- OVER CROWDING
- KATCHI ABADIS
- POVERTY
- UNREST
- CRIME





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NIPS's charter assign to it the responsibility of undertaking interdisciplinary research, impact studies of the population welfare programme, dissemination of information, training, special surveys and action-oriented research. It acts to interlink monitoring or development strategics with the changing demographic situations. Thus at macro level NIPS concerns itself with population and development; policy and programme evaluation; social and behavioral change, surveys and action-oriented research pertaining to population welfare undertaken by both the public and private sectors.