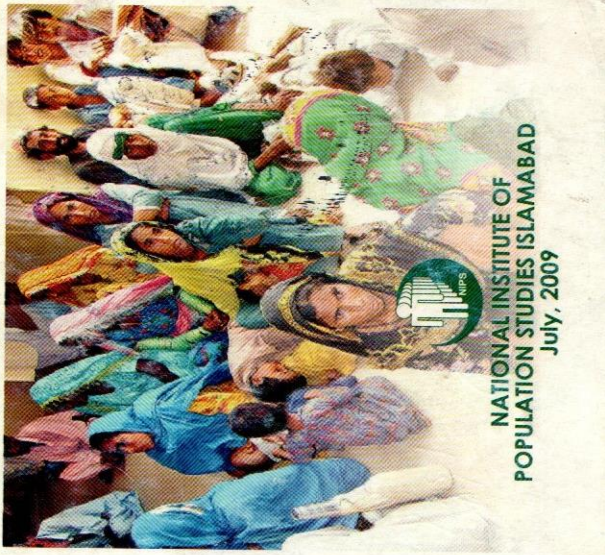
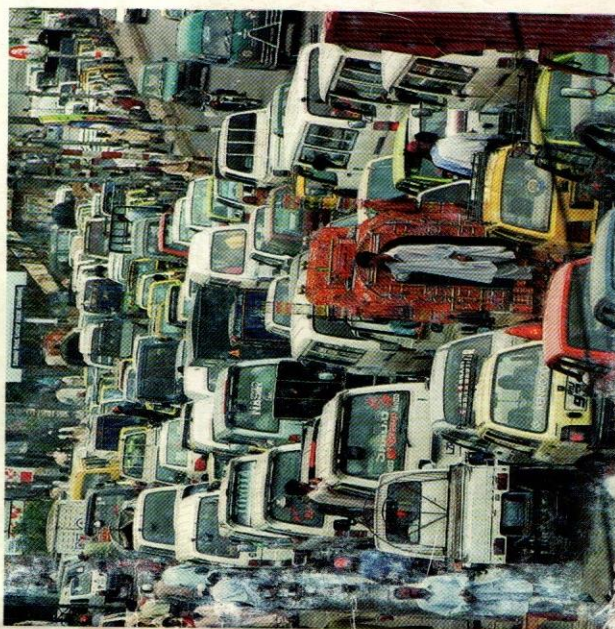


Population Growth & Its Implications

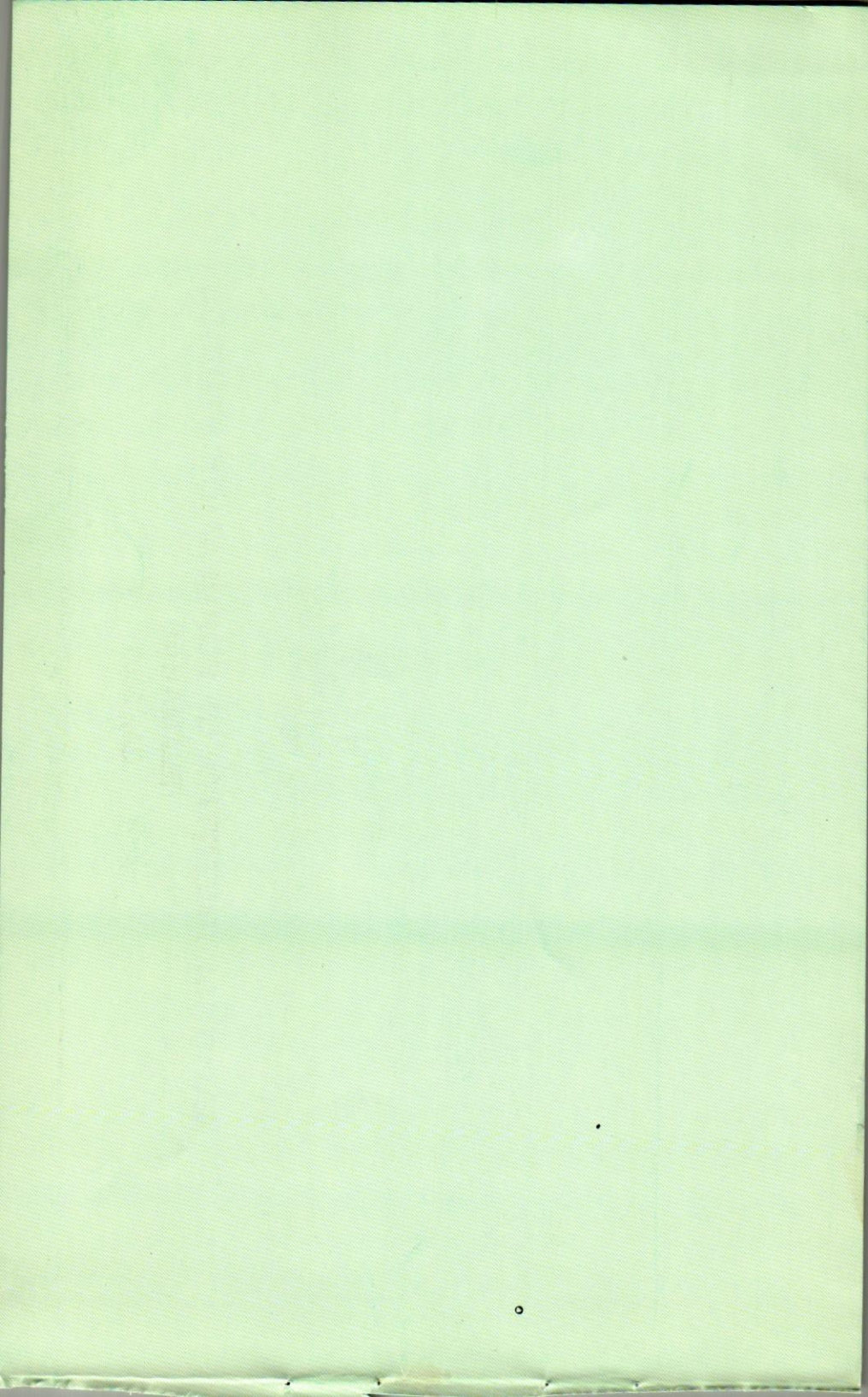


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TECHNICAL NOTE

How Population Grows?

World

$B - D$ in a year per 1000 Population

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

Country:

$B - D + I_m - E_m$

Province or District within each country:

$B - D + I_m - E_m + I_n - O_n$

Urban Area within each country:

$B - D + I_m - E_m + I_n - O_n + \text{Expansion}$

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

It means the population would double in 23 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
 I_m = Immigration

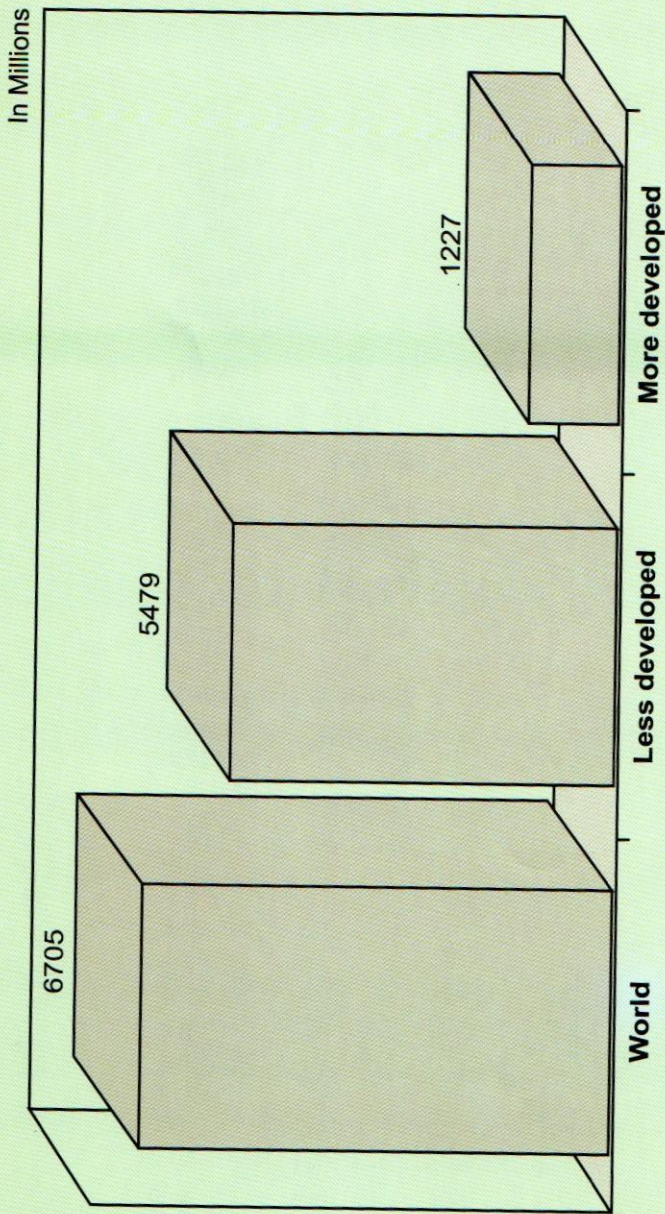
D = Deaths
 E_m = Emigration

CONTENTS

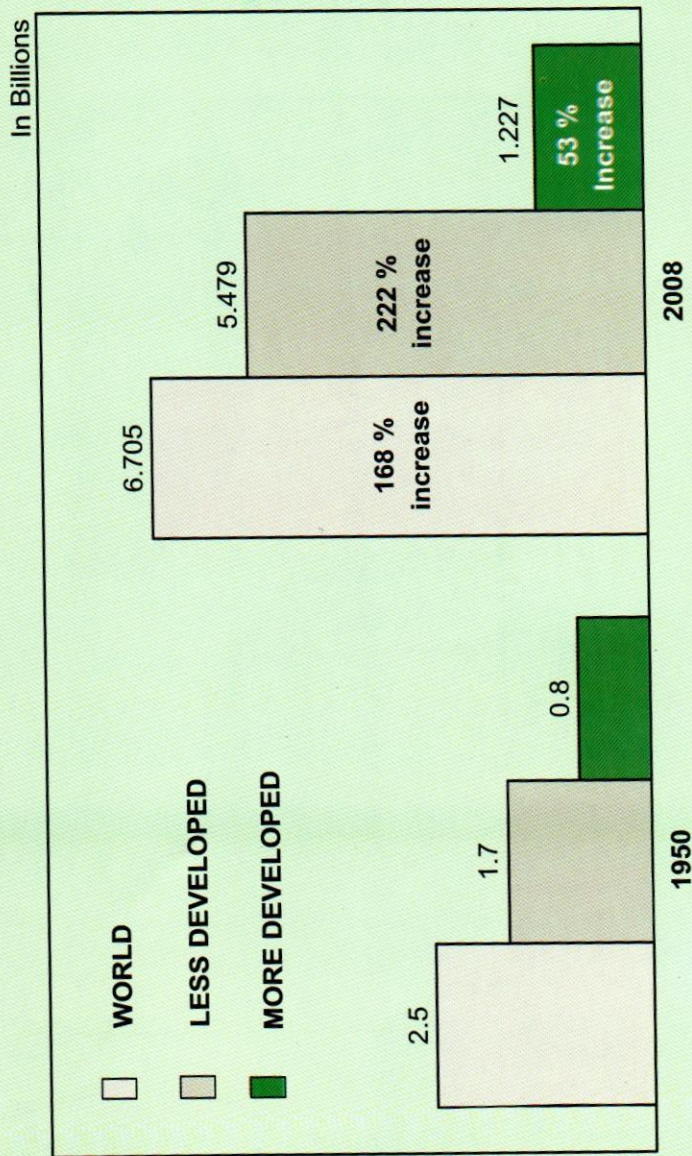
- World Population Profile
- Population Scenario of Pakistan
- Health and Family Planning Indicators
- Development Indicators
- Implication of Population Growth
- Pakistan Population Policy
- New Initiatives

WORLD POPULATION PROFILE

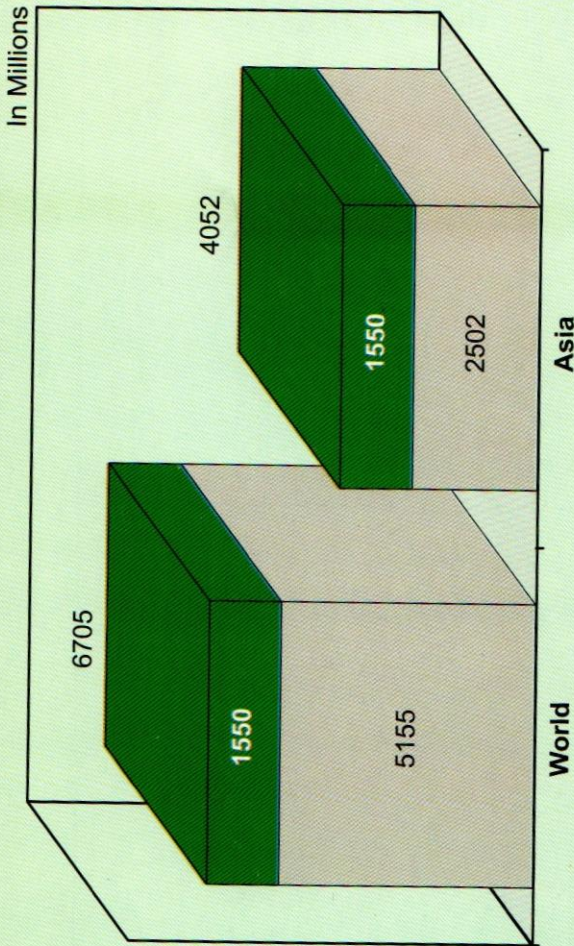
POPULATION, 2008



POPULATION TRENDS



WORLD POPULATION, 2008



Proportions:

SAARC

Asia

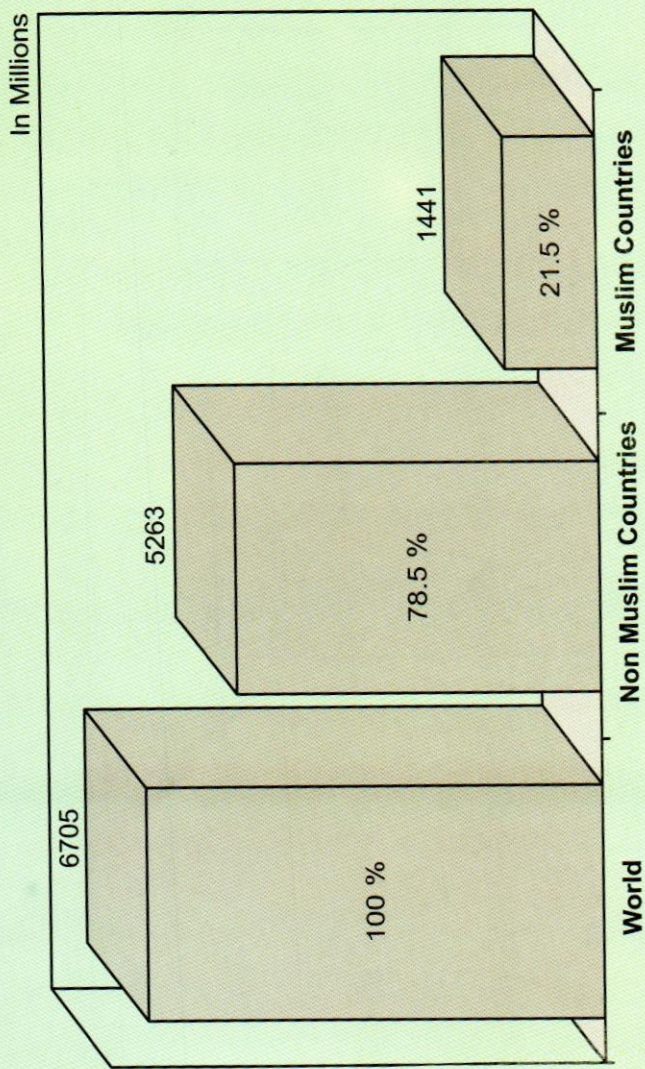
23.1 %

60.4 %

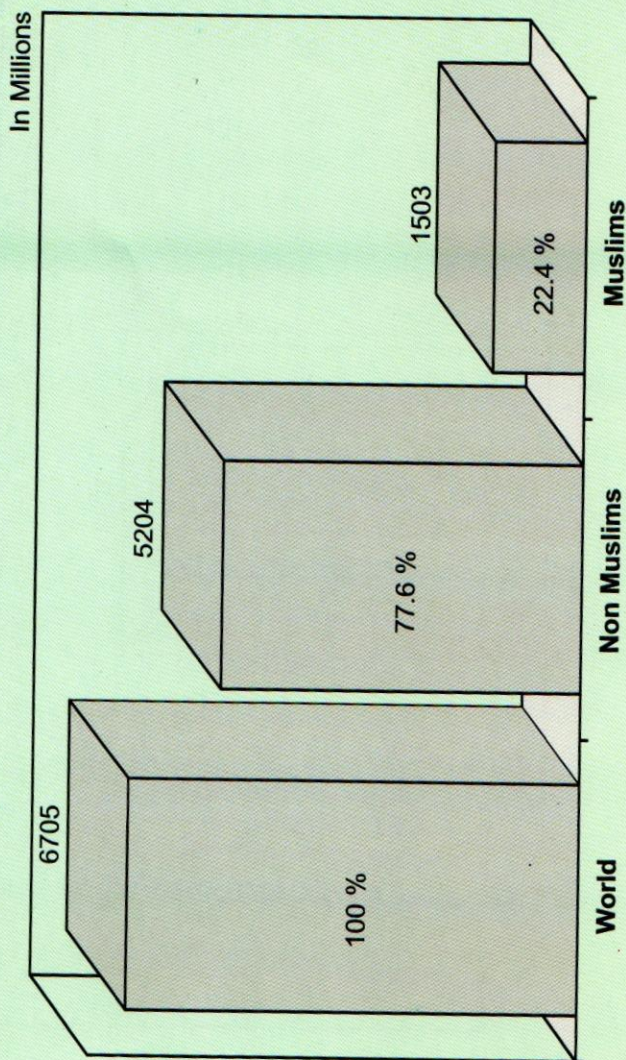
38.3%

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POPULATION IN MUSLIM AND NON-MUSLIM COUNTRIES, 2008



POPULATION OF MUSLIMS AND NON-MUSLIMS, 2008



TIME TAKEN TO ADD One Billion

Year	World Population	Years
1804	1	---
1927	2	123
1960	3	33
1974	4	14
1987	5	13
1999	6	12

POPULATION AND GNI/CAPITA

Regions	Population, 2008 (Million)	GNI - PPP/ Capita, 2007 (US \$)
World	6705	9600
More developed	1227	31200
Less developed	5479	4760
Asia	4052	5650
SAARC	1550	3131

POPULATION SCENARIO PAKISTAN

PAKISTAN

Share of World

2009

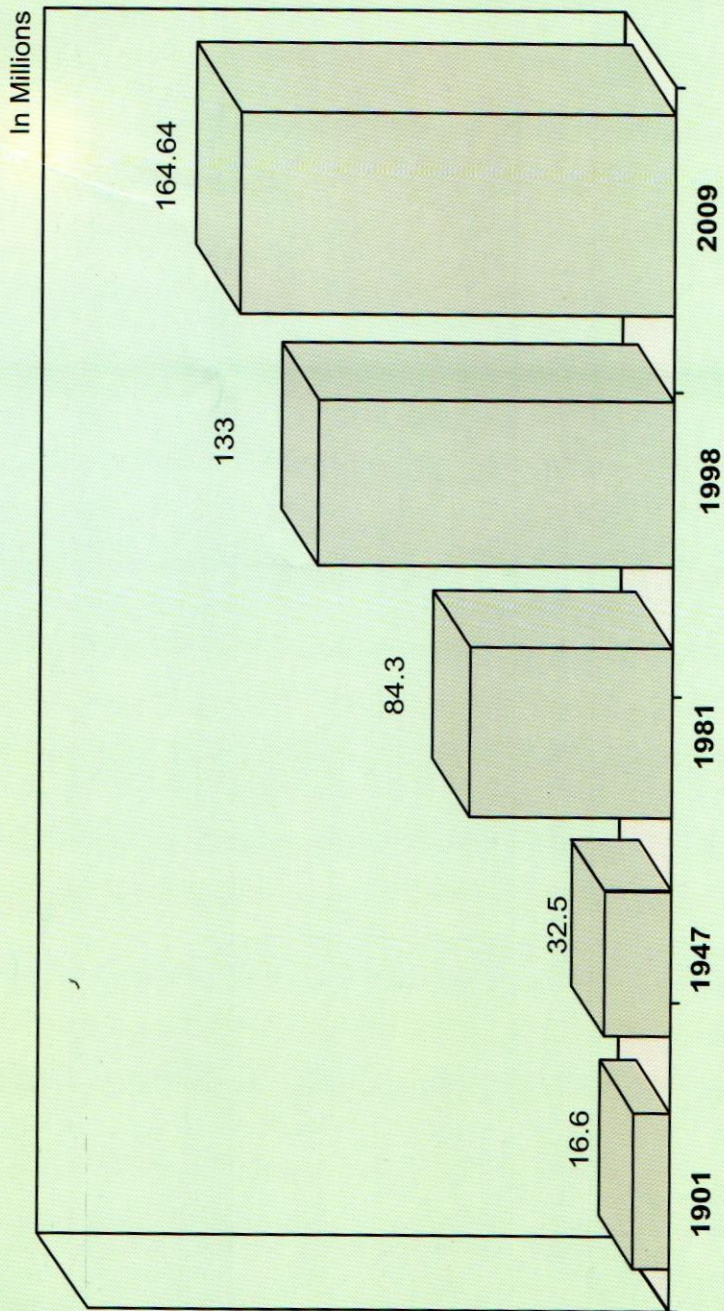
Area	0.796 (Million Sq. Km)	0.60 %
Population	164.64 (Million)	2.46

PAKISTAN'S POPULATION RANK ORDER IN THE WORLD

Year	Rank	Population (Million)
1950	14	33.0
2009	6*	164.64

* After China, India, USA, Indonesia and Brazil having Surpassed Japan, Bangladesh, Nigeria, Russia etc.

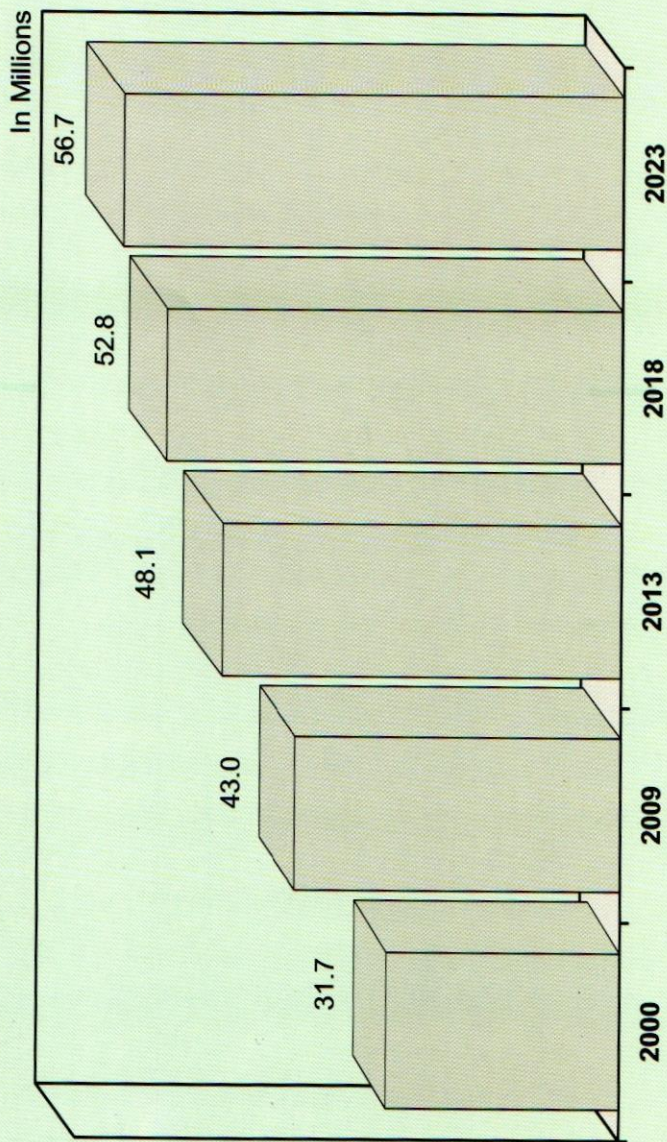
POPULATION SIZE OF PAKISTAN



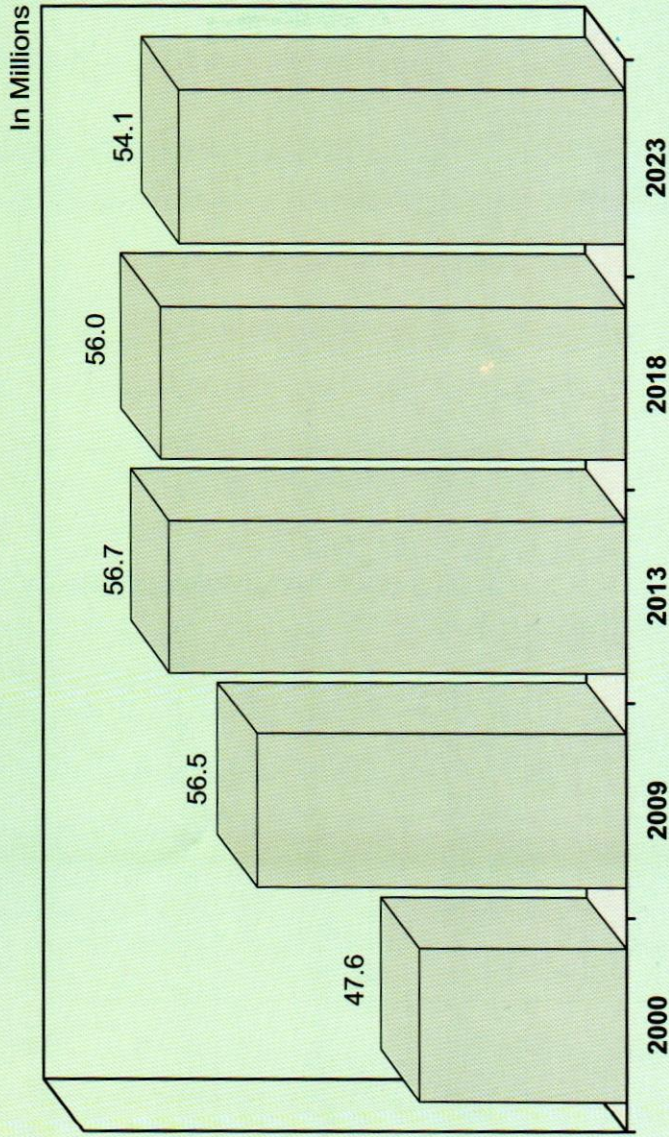
POPULATION PROJECTIONS BY PROVINCE (1998 - 2023)

Region	1998	2006	2009	2013	2018	2023
Pakistan	133.33	156.26	164.64	175.65	189.42	202.11
Punjab	74.20	86.26	90.52	96.15	103.25	109.86
Sindh	30.66	35.87	37.65	39.96	42.88	45.40
NWFP	17.90	21.39	22.78	24.59	26.74	28.85
Balochistan	6.62	8.00	8.57	9.31	10.24	11.08
FATA	3.12	3.62	3.88	4.23	4.71	5.18
Islamabad	0.83	1.12	1.25	1.41	1.59	1.74

PROJECTED POPULATION, WOMEN OF REPRODUCTIVE AGE (15 - 49 YEARS)



PROJECTED POPULATION, OF YOUTH (10-24 YEARS)



POPULATION BY SELECTED AGE GROUPS

In Millions

Age Group	2000	2009	2013	2018	2023
00 - 04	19.75	18.49	18.23	18.24	17.26
05 - 09	19.59	18.14	18.30	18.00	18.08
10 - 18	31.27	35.09	33.98	32.58	32.48
19 - 24	16.31	21.37	22.74	23.45	21.59
25 - 59	43.67	61.61	71.57	84.71	97.81
60 - 64	2.75	3.20	3.57	4.22	5.25
65 +	5.78	6.73	7.26	8.22	9.64
TOTAL	139.12	164.64	175.65	189.42	202.11

POPULATION GROWTH RATE

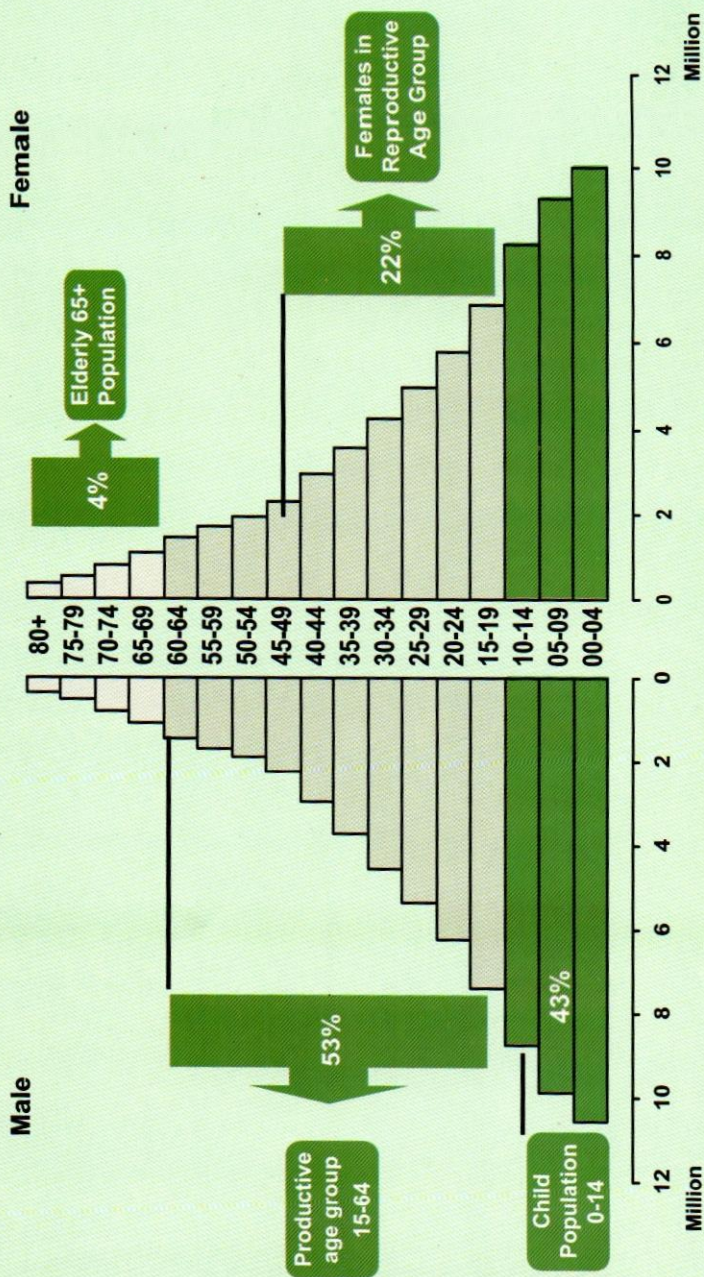
Period	Growth Rate (%)
1951 - 61	2.45
1961 - 72	3.66
1972 - 81	3.05
1981 - 98	2.69
2008	1.73

NET ADDITION IN POPULATION

	Births	Deaths	Addition
In one year	4210000	1320000	2890000
One month	350833	110000	240833
One day	11534	3616	79185
One minute	8	3	5

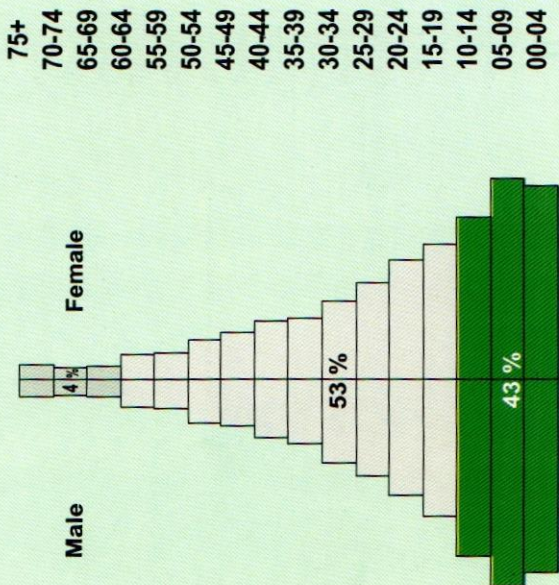
POPULATION PYRAMID

1998 Census



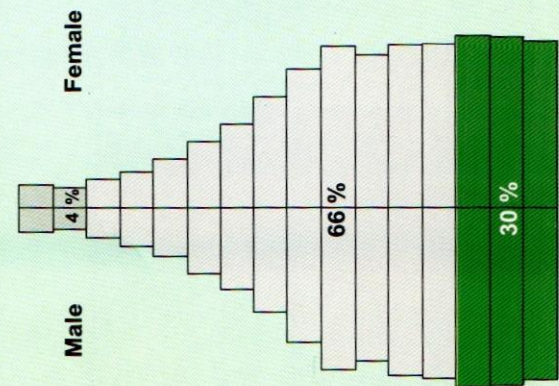
POPULATION PYRAMID, 1998 & 2020

TFR=4.8



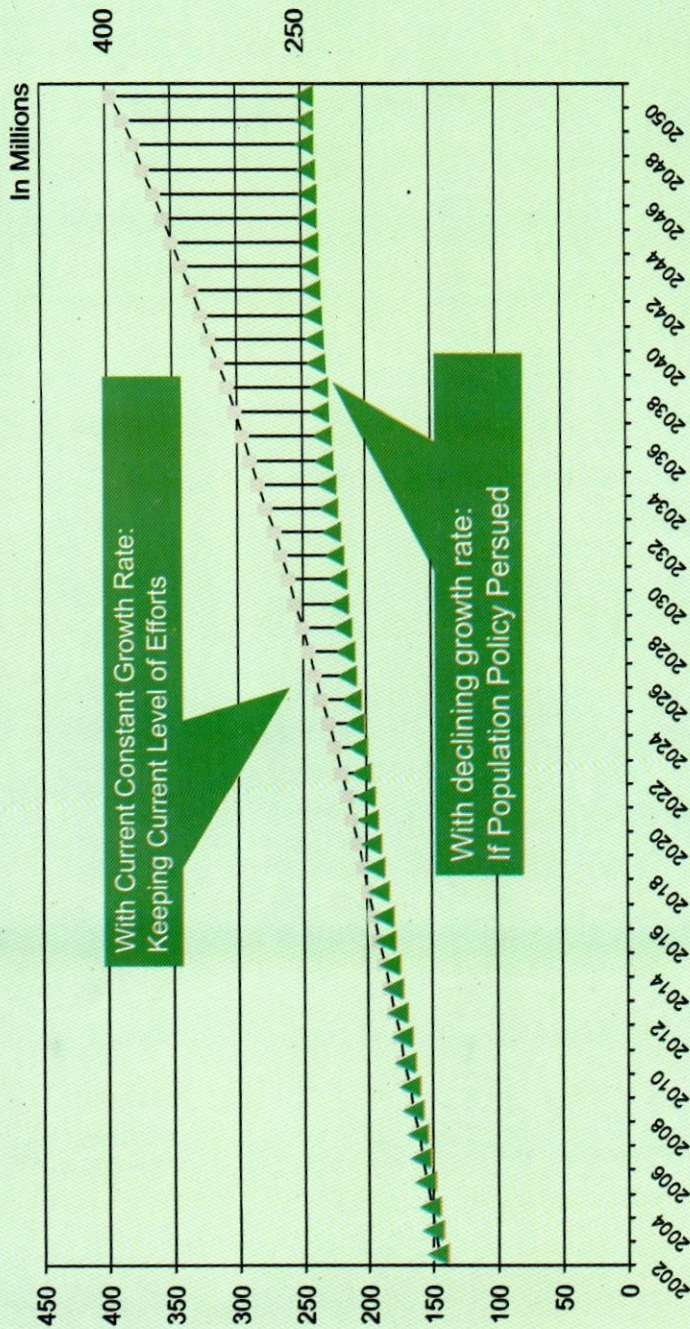
1998

TFR=2.1



2020

POPULATION GROWTH BY CONSTANT AND DECLINING GROWTH RATE ASSUMPTIONS, 2002 - 2050



**HEALTH AND FAMILY PLANNING
INDICATORS
PAKISTAN AND SELECTED COUNTRIES**

SELECTED HEALTH INDICATORS

Muslim Countries	Births attended by skilled health personnel (%)	Infants with low birth weight (%)	Maternal Mortality Ratio
Afghanistan	—	—	—
Algeria	96	7	140
Bangladesh	13	36	380
Egypt	74	12	84
Ethiopia	6	15	850
Indonesia	72	9	230
Iran	100	7	76

Contd.

SELECTED HEALTH INDICATORS

Muslim Countries	Births attended by skilled health personnel (%)	Infants with low birth weight (%)	Maternal Mortality Ratio
Malaysia	97	9	41
Morocco	63	11	220
Nigeria	35	14	800
Pakistan	39	19	276
Sudan	87	31	590
Turkey	83	16	70
Uzbekistan	96	7	24

INFANT MORTALITY AND LIFE EXPECTANCY

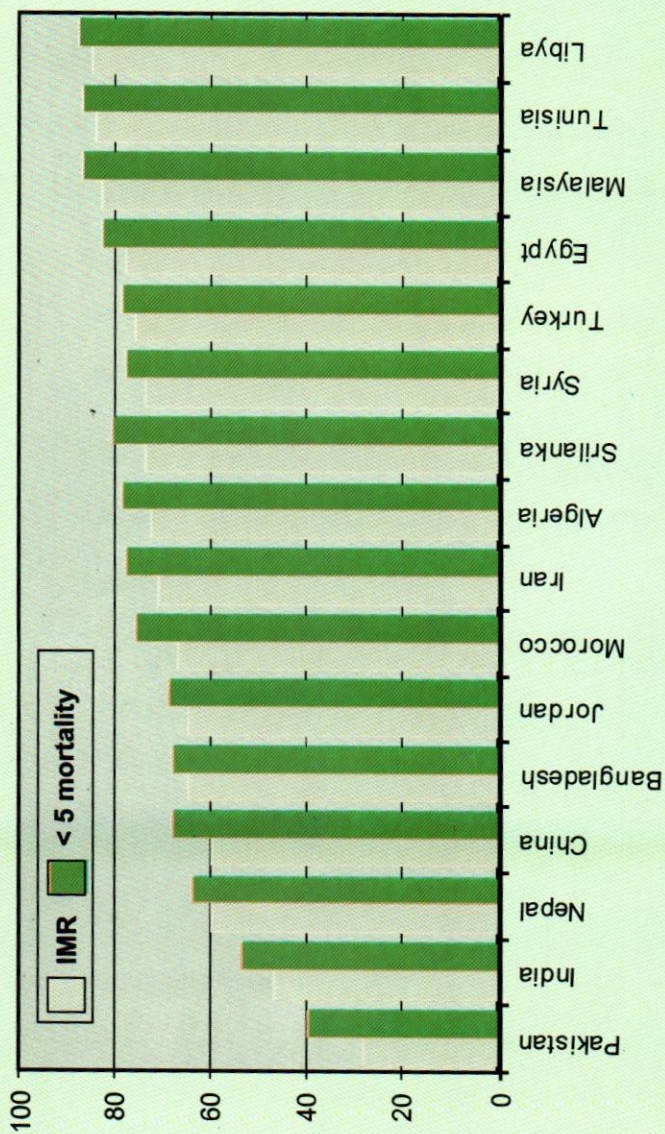
Muslim Countries	IMR	Life Expectancy (Male) Years	Life Expectancy (Female) Years
Afghanistan	163	43	43
Algeria	27	71	74
Bangladesh	52	62	64
Egypt	33	70	74
Ethiopia	77	48	51
Indonesia	34	69	72
Iran	32	69	72

Contd.

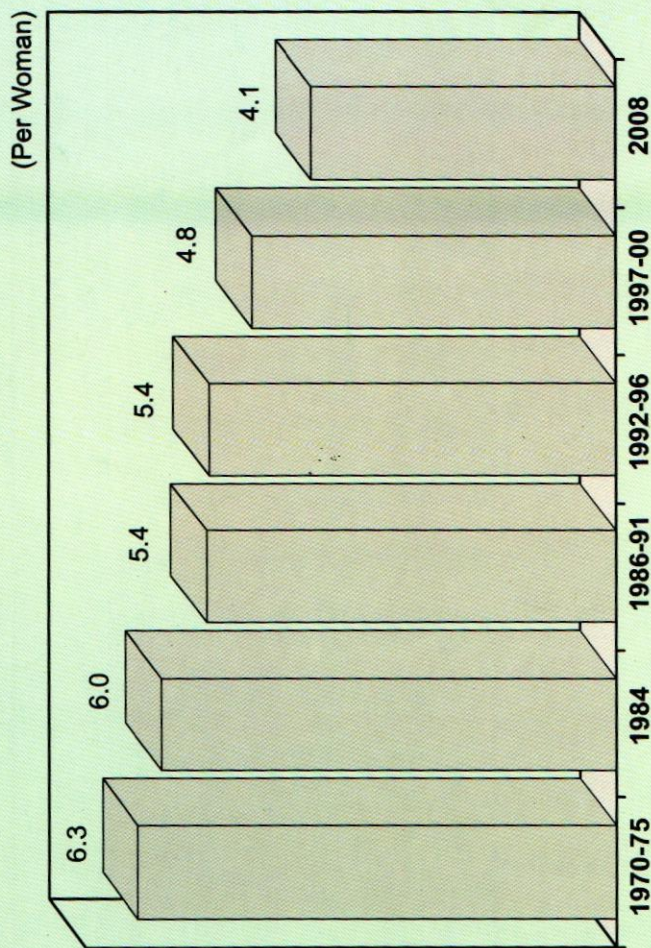
INFANT MORTALITY AND LIFE EXPECTANCY

Muslim Countries	IMR	Life Expectancy (Male) Years	Life Expectancy (Female) Years
Malaysia	9	72	76
Morocco	43	68	72
Nigeria	100	46	47
Pakistan	78	63.3	63.7
Sudan	81	56	59
Turkey	23	69	74
Uzbekistan	48	63	70

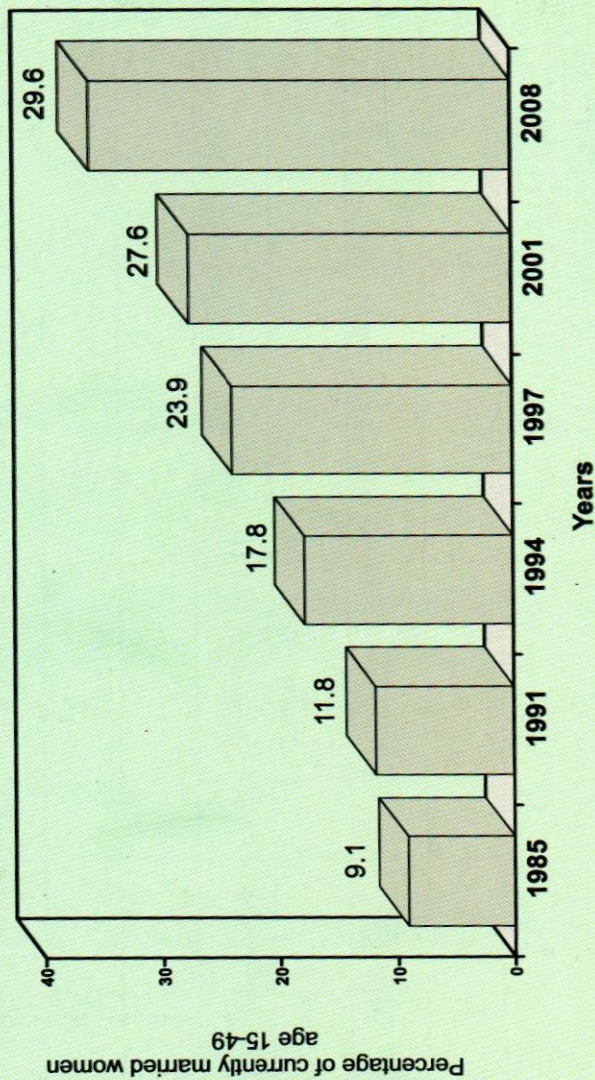
PERCENT DECLINE IN MORTALITY RATES IN SELECTED COUNTRIES 1970-75 TO 2000-05



TREND IN TOTAL FERTILITY RATE PAKISTAN, 1970-2008



TRENDS IN CONTRACEPTIVE PREVALENCE RATE (%), PAKISTAN, 1985-2008



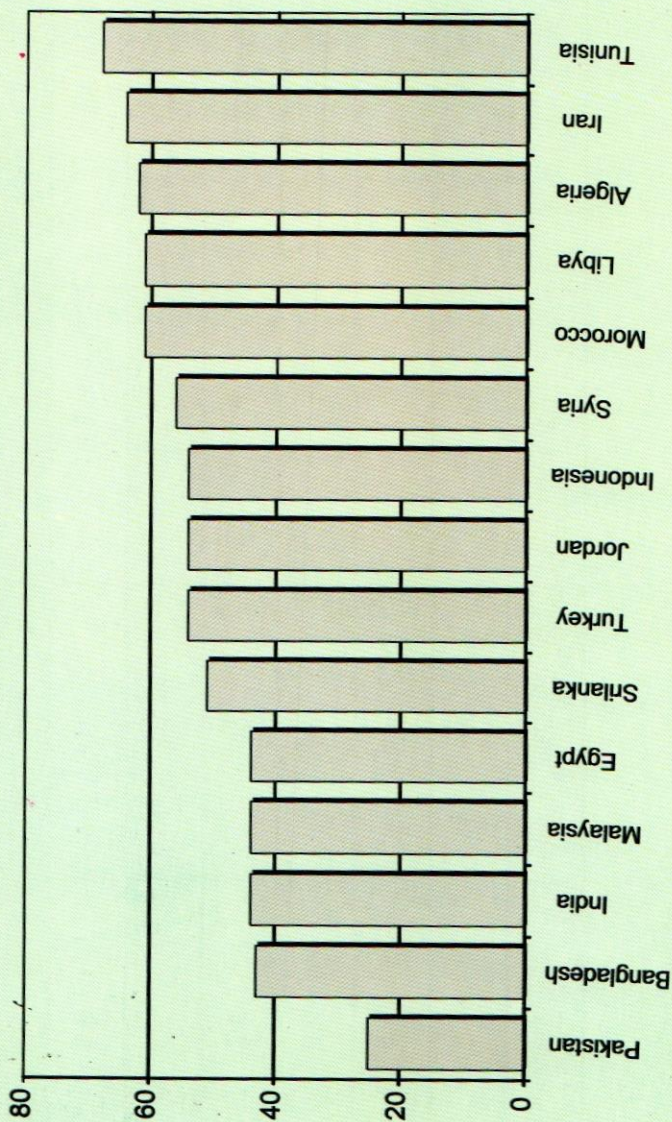
TOTAL FERTILITY RATE, CONTRACEPTIVE PREVALENCE RATE AND POPULATION GROWTH RATE, 2008

Muslim Countries	Total Fertility Rate	Contraceptive Prevalence Rate	Population Growth Rate
Malaysia	2.5	-	1.6
Morocco	2.4	63	1.4
Nigeria	5.9	12	2.5
Pakistan	4.1	30	1.7
Sudan	4.5	8	2.1
Turkey	2.2	71	1.2
Uzbekistan	2.7	65	1.7

TOTAL FERTILITY RATE, CONTRACEPTIVE PREVALENCE RATE AND POPULATION GROWTH RATE

Muslim Countries	Total Fertility Rate	Contraceptive Prevalence Rate	Population Growth Rate
Afghanistan	6.8	10	2.6
Algeria	2.3	61	1.8
Bangladesh	2.7	56	1.7
Egypt	3.1	59	2.0
Ethiopia	5.3	2.5	1.5
Indonesia	2.6	61	1.5
Iran	2.1	79	1.4

PERCENT DECLINE IN TFR IN SELECTED COUNTRIES 1970-75 To 2000-05



DEVELOPMENT INDICATORS:

MUSLIM COUNTRIES OF

25 MILLION OR MORE POPULATION

POPULATION LIVING BELOW INTERNATIONAL POVERTY LINE

Muslim Countries	Total Population 2008 (million)	Population living below \$1 a day (%)	Population living below \$2 a day (%)
Afghanistan	32.7	—	—
Algeria	34.7	2	15.1
Bangladesh	147.3	41.3	84.0
Egypt	74.9	3.1	43.9
Ethiopia	79.1	23.0	77.8
Indonesia	239.9	7.5	52.4
Iran	72.2	2	7.3

Contd.

POPULATION LIVING BELOW INTERNATIONAL POVERTY LINE

Muslim Countries	Total Population	Population living below \$1 a day (%)	Population living below \$2 a day (%)
Malaysia	27.7	2	9.3
Morocco	31.2	2	14.3
Nigeria	148.1	70.8	92.4
Pakistan	164.6	17.0	73.6
Sudan	39.4	—	—
Turkey	74.8	3.4	18.7
Uzbekistan	27.2	21.8	77.5

RANKING BY HUMAN DEVELOPMENT AND HUMAN POVERTY INDICES

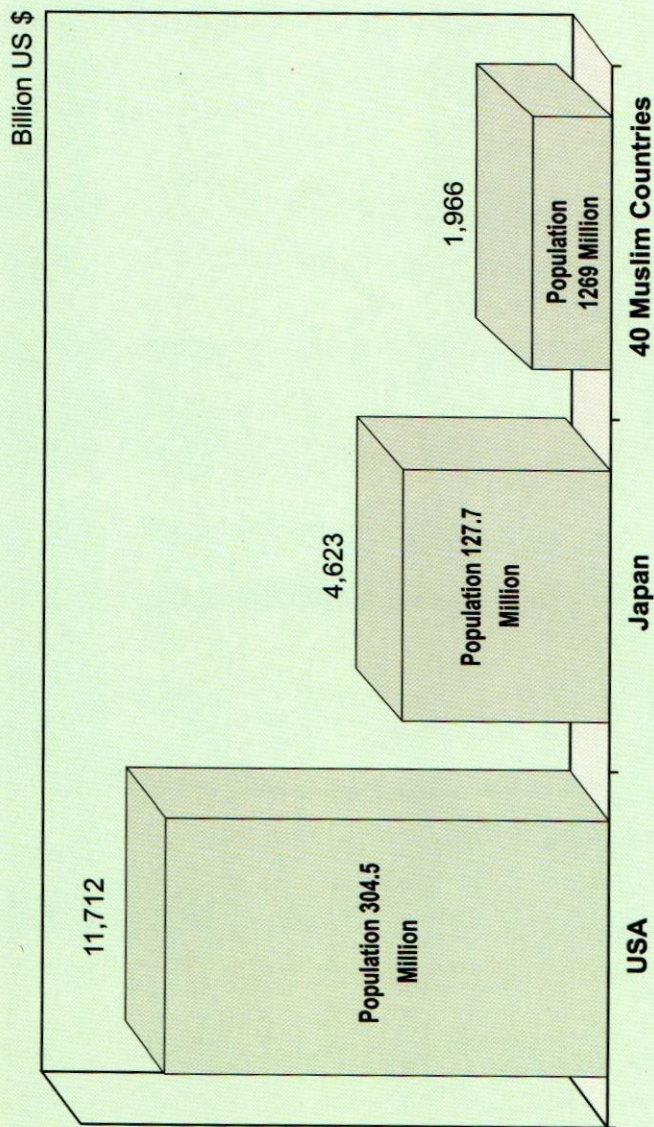
Muslim Countries	Rank Order Human Development Index	Rank Order Human Poverty Index
Afghanistan	—	—
Algeria	104/177	51/102
Bangladesh	140/177	93/102
Egypt	112/177	48/102
Ethiopia	169/177	105/102
Indonesia	107/177	47/102
Iran	94/177	30/102

Contd.

RANKING BY HUMAN DEVELOPMENT AND HUMAN POVERTY INDICES

Muslim Countries	Rank Order Human Development Index	Rank Order Human Poverty Index
Malaysia	63/177	16/102
Morocco	126/177	68/102
Nigeria	158/177	80/102
Pakistan	136/177	77/102
Sudan	147/177	69/102
Turkey	84/177	22/102
Uzbekistan	113/177	-

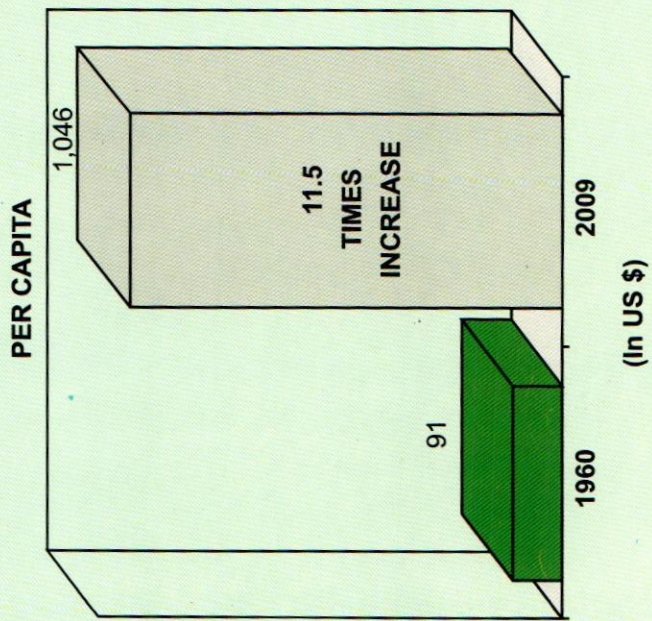
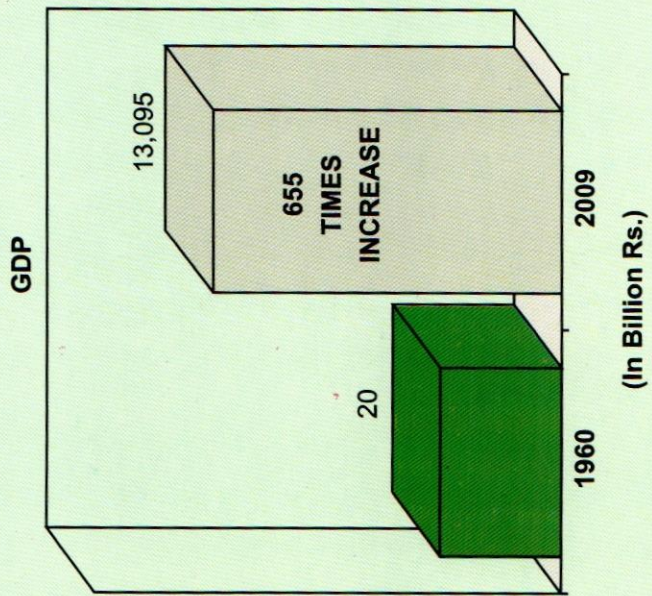
GROSS DOMESTIC PRODUCT, 2008



IMPLICATIONS OF POPULATION GROWTH

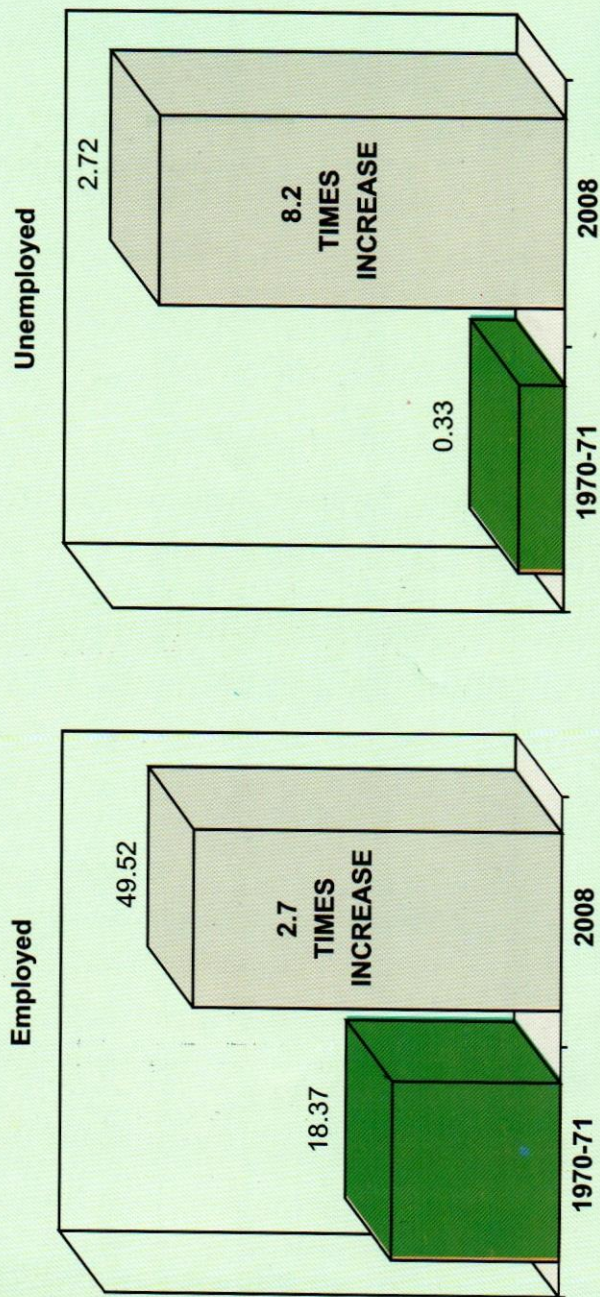
GDP AND PER CAPITA INCOME OF PAKISTAN

1960 - 2009

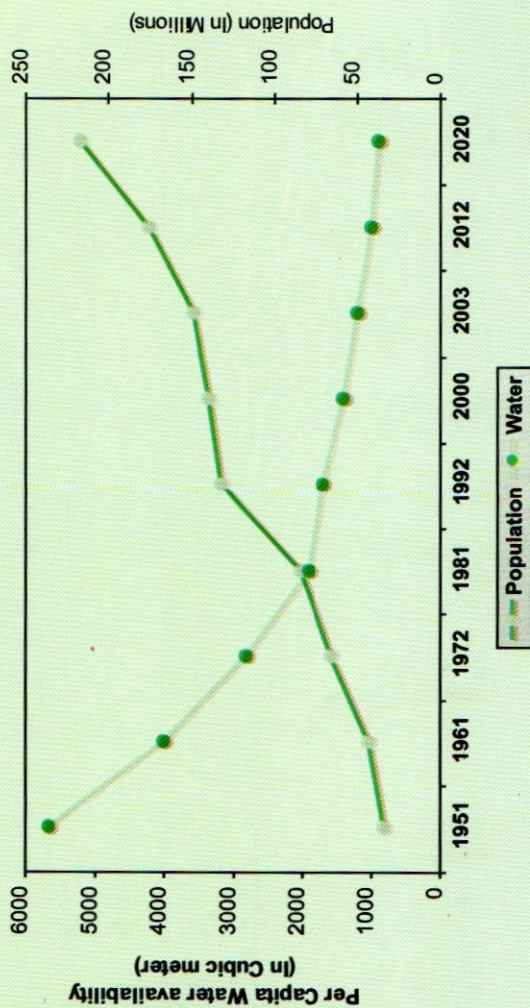


EMPLOYMENT AND UNEMPLOYMENT

(Persons in Million)



WATER AVAILABILITY VS POPULATION GROWTH



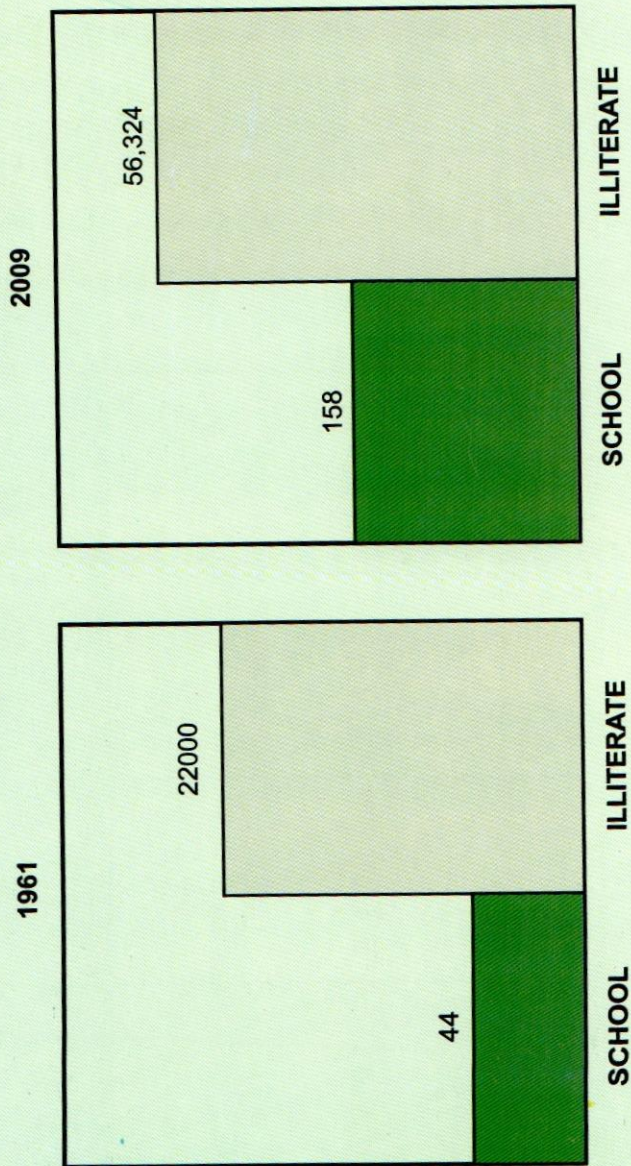
Parameters/Years	1951	1961	1972	1981	1992	2000	2003	2012	2020
Water availability	5650	4000	2800	1900	1700	1400	1200	1000	885
Population	33.7	42.8	65.3	84.2	132.0	140.0	149.0	176.0	216.8

NUMBER OF PRIVATE FARMS

Farm Size (Acres)	1980		2000	
	Number (Million)	Percent	Number (Million)	Percent
Under 3 acres	2.07	50.90	4.78	72.2
03 - 05	0.92	22.60	0.89	13.4
05 - 10	0.71	17.40	0.58	08.8
10 +	0.37	09.10	0.37	05.6
Total	4.07	100.0	6.62	100.0

PRIMARY SCHOOLS AND ILLITERATE POPULATION 1961 - 2009

(In Thousand)



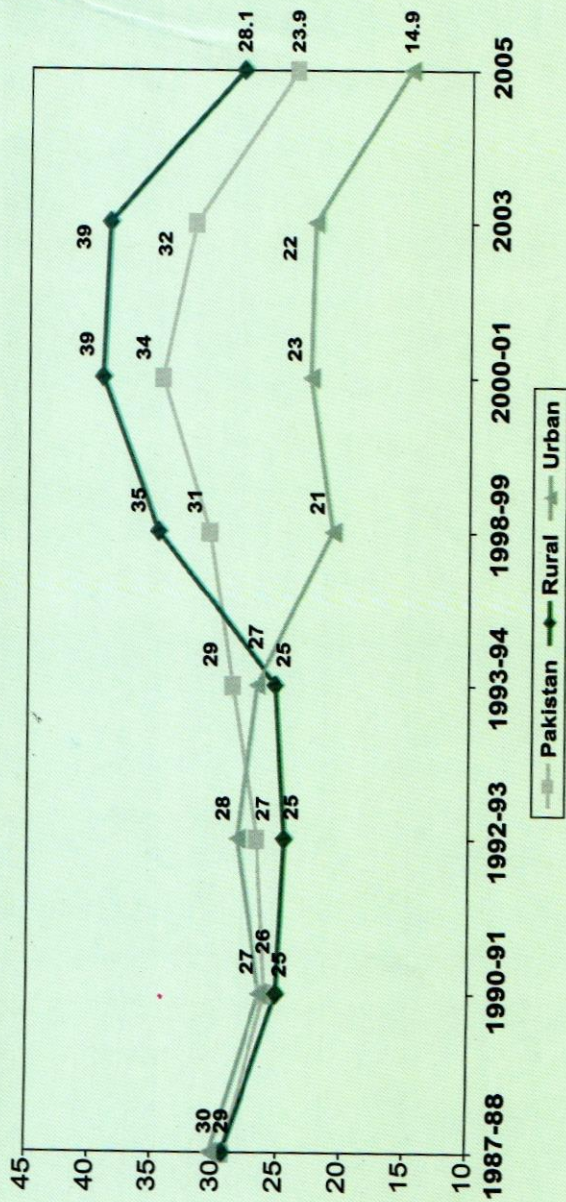
POPULATION LITERACY RATES AND NUMBER OF ILLITERATES BY PROVINCES, 2009

Region	Population age 10 + (Millions)		Literacy rate (%)		Number of Illiterate (Millions)		
	Male	Female	Male	Female	Male	Female	Total
Punjab	36.49	34.41	70	48	10.95	17.89	28.84
Sindh	15.59	14.08	69	42	4.83	8.17	13.00
NWFP	8.82	8.48	68	33	2.82	5.68	8.50
Balochistan	3.40	2.98	66	23	1.16	2.29	3.45
Total	64.30	59.95	69	44	19.76	34.03	53.79

Literacy rate at national level was 26.9 percent for male and 8.2 percent for female in 1961

ESTIMATES OF POVERTY IN PAKISTAN

(Based on 2350 calories per adult) (%)



OTHER HARD FACTS

In Millions

Population living below poverty line	41.76
Population with no access to safe drinking water	60.9
Population with one room houses	62.1
Population with no sanitation	83.7

SUMMARY IMPLICATIONS

SHORTAGE OF:	
o Educational facilities	o Living space
o Health services	o Arable land
o Housing units	o Clean water
o Food	
INCREASE IN:	
o Unemployment	o Over crowding
o Land fragmentation	o Katchi abadies
o Import of food etc.	o Poverty
o Environmental problems	o Unrest
o Congestion in households	o Crime

PAKISTAN

POPULATION POLICY 2002

VISION

- Achieve population stabilization by 2070 through: (a) universal coverage of population welfare programme by 2010; and (b) achieving replacement level fertility by 2020.

POLICY GOALS

- Attain a balance between resources and population growth within the broad parameters of the ICPD paradigm.
- Address various dimensions of the population issue within national laws, development priorities while remaining within the national, social and cultural norms.
- Increase awareness of the adverse consequences of rapid population growth at the national, provincial, district and community levels.
- Promote family planning as an entitlement based on informed and voluntary choice.
- Attain a reduction in fertility through improvement in access and quality of reproductive health services.
- Promotion of research: NIPS has been mandated to do research "Covering all aspects of population and development such as education, health, women empowerment, labour force, ageing, adolescent and urbanization".

POLICY OBJECTIVES

- To attain Population Stabilization through:
- Reduction in TFR to 2.1 by 2020
- Increase CPR to 60% by 2020.
- Reduction in PGR to 1.3% by 2020.

STRATEGIES

- Launch advocacy campaigns for all segments of the society.
- Ensure ownership and participation of communities and stakeholders in service delivery.
- Reduce unmet need for quality family planning & RH services.
- Adopt a shift from target oriented to people-centred approach.
- Create a comprehensive network of family planning & RH services in Pakistan.
- Build stronger partnership with all stakeholders in private and public sectors.
- Mainstream population factor as a cross cutting issue.
- Strengthen contribution to population activities by all stakeholders.
- Expand Social Marketing of contraceptives: accessible and affordable in rural and under-served areas.
- Bring attitudinal change in men to adopt small family norms and responsible parenthood.
- Involvement of opinion leaders & religious scholars.
- Expand family planning services to under-served areas

SERVICE DELIVERY COMPONENTS

PROGRAMME:		
Family Welfare Centres (FWC)		2,846
Reproductive Health Services 'A' Centres		176
Mobile Service Units		292
Male Mobilizers		5,430
NON-PROGRAMME:		
RHS-B Centres		103
Registered Medical Practitioners		26,655
Hakims and Homoeopaths		27,076
Health outlets of Health departments		14,040
Outlets of Provincial Line departments		6,580
Lady Health Workers of National Programme for FP and Primary Health care		85,983*
RESEARCH AND TRAININGS:		
National Institute of Population Studies, Islamabad		1
National Research Institute of Fertility Care, Karachi		1
Population Welfare Training Institutes		2
Regional Training Institutes		13

*Working against sanctioned post of 1000,000

NEW INITIATIVES

POPULATION SECTOR INITIATIVES

- National Population commission - 2006
- Provincial Population Councils - 2006
- Joint Steering committee of Health & Population - 2005
- Social Sector Coordination Committee
- Focal Points in all 38 Ministries/Divisions
- Revitalization of District Technical committees

Contd.

POPULATION SECTOR INITIATIVES

- Expansion of Service Delivery Outlets
- Capacity Building of Training & Research Institutes
- Partnership with Private & Corporate Sector Organization
- Establishment of RTI at Sialkot (Punjab)
- Establishment of two Safe-Mother Homes a Pilot Project (Fy: 2009-10)
- Up-gradation of eight (08) FWCs as Multipurpose Service Centres as a Pilot Project (Fy: 2009-10)
- Induction of new cadre of Social Mobilizers (Female)

Contd.

POPULATION SECTOR INITIATIVES

- International Ulama Conference - 2005
- Follow-up of IDPD - 2006
- International Population Summit - 2005
- Follow-up of Population Summit - 2006
- Advocacy Seminar for Parliamentarians - 2005
- Donors Collaboration



NATIONAL INSTITUTE OF POPULATION STUDIES (NIPS)

NIPS aspires to attain prominence as "Centre of Excellence", recognizable nationally and internationally for reliability and high quality of its research, Training and human resources development. Monitoring and evaluation in the areas of population and development. Conceived to fulfill explicit aims. **NIPS** is set out to play a key role in the dynamics of national population and its complexities. Its canvas of activities is challengingly broad embracing socioeconomic dimensions of a determined young nation.

An autonomous organisation with a board of governors and an Advisory Committee of experts. **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 strategies with the changing demographic situation. 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 sector.