

Pakistan

A Country Profile



October 1979

Office of Foreign Disaster Assistance
Agency for International Development
Washington, D.C. 20523

PAKISTAN: A COUNTRY PROFILE

prepared for

The Office of U. S. Foreign Disaster Assistance
Bureau for Private and Development Cooperation
Agency for International Development
Department of State
Washington, D. C. 20523

by

Evaluation Technologies, Inc.
Arlington, Virginia
under contract AID/SOD/PDC-C-0283

The profile on Pakistan is one in a series designed to provide base-line country data in support of the planning, analysis and relief operations of the Office of U. S. Foreign Disaster Assistance (OFDA). Content, scope and sources have evolved over the course of the last three years, and no doubt will continue to do so. The relatively narrow focus is intentional. To avoid redundancy, some topics one might expect to find in a "country profile" are not covered here.

If the information provided can also be useful to others in the disaster assistance and development communities, so much the better. Every effort is made to obtain current, reliable data; unfortunately it is not possible to issue updates as fast as changes would warrant. A cautionary note, therefore, to the reader: statistics are indicators at best, and if names and numbers matter, the bibliography will point to a current source.

We invite your comments and corrections. Address these and other queries to OFDA, AID, as given above.

December 1979

OFDA COUNTRY PROFILES: DECEMBER 1979

AFRICA

Angola**
Cape Verde
Chad
Djibouti
Ethiopia
Madagascar
Mali
Mauritania
Niger*
Sahel Transportation Survey
Senegal
Somalia
Upper Volta
Zaire

CARIBBEAN

CARICOM Regional Profile
Dominican Republic
Haiti

LATIN AMERICA

Bolivia
Brazil
Chile
Ecuador
Guatemala
Honduras
Nicaragua
Peru

ASIA

Afghanistan
Bangladesh
Burma
India
Indonesia
Malaysia
Nepal
Pakistan
Philippines

NEAR EAST

Lebanon**
Turkey

SOUTH PACIFIC

Fiji
Tonga
Western Samoa

* in preparation
** out of print



CONTENTS

List of profiles.....	i
Preface.....	ii
Map.....	iii
1. General Information.....	1-6
1.1 Geographic codes.....	1
1.2 Country names.....	1
1.3 Calendar and holidays.....	1
1.4 Currency.....	2
1.5 Time zones.....	2
1.6 US mission and staff.....	2
1.7 Sister cities.....	3
1.8 Host country mission and staff in US.....	3
1.9 Treaties and agreements.....	4
1.10 International organization memberships.....	4
1.11 Travel and visa information.....	5
1.12 Ethnic and sociocultural groups.....	5
1.13 Languages.....	5
1.14 Education.....	6
1.15 Religions.....	6
2. Government.....	7-10
2.1 National government.....	7
2.2 Regional organization.....	7
2.3 Divisions and districts.....	7
2.4 Tribal areas.....	8
2.5 Major government figures.....	9
3. Disaster Preparedness.....	11-20
3.1 Host disaster plan.....	11
3.2 US mission plan.....	12
3.3 Host contact list.....	12
3.4 US contact list.....	14
3.5 Mission disaster relief team.....	15
3.6 International disaster relief team.....	16
3.7 US voluntary agencies (volags).....	18
3.8 Pakistani voluntary agencies.....	19
3.9 Disaster types and history.....	19

4. Population.....	21-25
4.1 National demographic characteristics.....	21
4.2 Regional distribution.....	21
4.3 Migration.....	25
5. Health, Nutrition and Housing.....	26-31
5.1 Overall health.....	26
5.2 Summary of diseases.....	26
5.3 Vital statistics.....	27
5.4 Health services and facilities.....	27
5.5 Health personnel.....	28
5.6 Family planning.....	29
5.7 Diet summary.....	29
5.8 Staple foods.....	29
5.9 Nutritional deficiencies.....	30
5.10 Utensils and cooking.....	31
5.11 Housing.....	31
6. Economy.....	32-37
6.1 Overview of economy.....	32
6.2 GNP.....	32
6.3 Industry.....	33
6.4 Current economic status.....	34
6.5 Balance of payments.....	35
6.6 Imports.....	36
6.7 Exports.....	37
7. Agriculture.....	38-43
7.1 Overview of agriculture.....	38
7.2 Crop dates.....	39
7.3 Acreage under cultivation.....	40
7.4 Current agricultural status.....	41
7.5 Agricultural imports.....	42
7.6 Agricultural exports.....	42

TO:

COUNTRY PROFILE USER

Dear _____

Please use this form to note any changes, additions, corrections or suggestions you think would update and improve this country profile. Since our aim is to make these profiles as relevant as possible, your critique is essential and very much wanted. Return comments to Lucy Drobot, OFDA Country Profiles, Room 1262A.

NAME/OFFICE: _____ PHONE: _____ Date: _____

TOPIC

COMMENTS

TOPIC	COMMENTS

8. Physical Geography.....	44-49
8.1 Climate.....	44
8.2 Topography.....	46
8.3 Altitudes and coordinates.....	47
8.4 Land use.....	47
8.5 Rivers.....	47
8.6 Irrigation.....	48
8.7 Mountains.....	49
8.8 Seismicity.....	49
9. Transportation and Logistics.....	50-62
9.1 Road network.....	50
9.2 Mountain passes.....	50
9.3 Vehicles.....	50
9.4 Surface miles.....	51
9.5 Railroad network.....	51
9.6 Ports.....	52
9.7 Shipping.....	55
9.8 Airports.....	56
9.9 Personnel entry requirements.....	60
9.10 Aircraft entry requirements.....	60
9.11 Airlines.....	61
9.12 Air distances.....	62
10. Power and Communications.....	63-65
10.1 Energy sources.....	63
10.2 Telephone systems.....	64
10.3 Radio.....	64
10.4 Television.....	65
Bibliography.....	66-68

1. General Information1.1 Geographic Codes

AID	391
FIPS	PK
State region	NEA

1.2 Country Names

Legal	Islamic Republic of Pakistan
Short	Pakistan

1.3 Calendar and Holidays

Id-i-Milad.....January 31, 1980*
 Pakistan Day.....March 23
 May Day.....May 1
 Bank Holiday.....July 1
 Jumat-ul-Wida.....August 8, 1980*
 Id-ul-Fitr (end of Ramazan).....August 12-13, 1980*
 Independence Day.....August 14
 Defence of Pakistan Day.....September 6
 Death of Qaid-i-Azam.....September 11
 Id-ul-Aza.....October 20-21, 1980*
 Birth of Iqbal.....November 9
 MuhurramNovember 18-19, 1980*
 Birth of Qaid-i-Azam; Christmas..December 25

*Muslim holidays occur approximately 10 days earlier each year.

Fiscal year: 1 July - 30 June

1.4 Currency (Dec. 1979)

9.71 rupees = 1 US dollar
100 paisa = 1 rupee

1.5 Time Zones

EST + 10; GMT + 5

1.6 US Mission to Pakistan and Staff (Dec. 1979)

Embassy of the United States
Diplomatic Enclave
Ramna 4
Islamabad, Pakistan
Phone: 26161-26179; Telex 952-5-864

Ambassador.....Arthur W. Hummel, Jr.
Deputy Chief of Mission.....Barrington King
Economic/Commercial Section.....Lawrence J. Kennon
Political Section.....Herbert G. Hagerty
Administrative Section.....David C. Fields
Regional Security Officer.....Andrew W. Koritko
Agricultural Section.....Charles M. Clendenen
Agency for International Development...Michael H. B. Adler
Public Affairs Officer (USICA).....James P. Thurber, Jr.

Karachi (Consulate General)
8 Abdullah Haroon Rd.
Phone: 515081

Consul General.....Richard St. F. Post
Political/Economic Section.....John S. Brims
Commercial Section.....J. Richard Sousane
Consul, Consular Section.....Elizabeth Bowen
Administrative Section.....Samuel C. Case
Branch Cultural Affairs Officer(USICA).Paul J. Rappaport

Lahore (Consulate General)
 50 Zafar Ali Rd.
 Phone: 81081-5

Consul General.....A.S. Cleveland Fuller
 Political Section.....Stephen E. Eisenbraur
 Administrative Section.....James L. Larkin
 Branch Cultural Affairs Officer.....Douglas H. Smith

Peshawar (Consulate)
 11 Hospital Rd.
 Phone: 73061, 73405

Consul, Consular Section.....Douglas B. Archard
 Branch Public Affairs Officer (USICA)...George P. Havens

1.7 Sister Cities

Lahore	Fresno, CA
Peshawar	Cortland, NY

1.8 Host Country Mission and Staff in US (August 1979)

Embassy of Pakistan
 2315 Massachusetts Ave., N.W.
 Washington, D.C. 20008
 Phone: 202/332-8330

Annex
 2201 R Street N.W.
 Washington, D.C. 20008
 Phone: 202/234-6231

Ambassador.....Muhammad Khan
 Minister (Political).....Hayat Mehdi
 Counselor (Head of Chancery).....Shamshad Ahmad
 Counselor (Political).....Touqir Hussain
 Minister (Economic).....Ihsan ul Haq

Counselor (Food and Agriculture)....Zafarullah Khan
Attache (Education).....Mumtaz Akbar
Counselor (Press).....Khalid Ali
Defense and Air Attache.....Air Commodore Rais Ahmed Rafi
Naval Attache.....Capt. Saeed M. Khan
Army Attache.....Col. Mahmud Ali Durrani
Attache (Defense Procurement-Air)...Group Capt. Iqtedar Ali Khan
Attache (Defense Procurement-Army &
Navy).....Lt. Col. Abdul Basit

1.9 Treaties and Agreements

Agreement re duty-free and defrayment of inland transportation charges on relief supplies and packages to Pakistan
Agreement for financing of exchange programs
Agreement relating to trade in cotton textiles
Agricultural commodities agreement
Air services agreement
Bilateral agreement of cooperation.
Convention for the avoidance of double taxation of income
Debt rescheduling agreement
Investment guaranty agreement
Mutual defense assistance agreement
Peace corps agreement
Technical cooperation agreement
Treaty of friendship and commerce

1.10 International Organization Membership

ADB, CENTO, Colombo Plan, FAO, GATT, G-77, IAEA, IBRD, ICAC, ICAO, IDA, IFC, IHO, ILO, IMCO, IMF, ITU, IWC (International Wheat Council), RCD, U.N., UNESCO, UPU, WHO, WMO, WSG, WTO. Pakistan withdrew from the Southeast Asia Collective Defense Treaty (SEATO) and the Pacific Charter in November 1973.

1.11 Travel and Visa Information

No visa required for transit stay up to 15 days, or tourist stay up to 30 days. This does not apply to nationals of India, Afghanistan, South Africa, Bangladesh, stateless persons and countries not recognized by Pakistan. Foreign tourists entering through regular check posts are not required to obtain road permits if tourist stamps are affixed to their passports. Smallpox immunization required. Cholera and typhoid immunization and malaria suppressants recommended.

Border with India open at Wagah (between Lahore and Amritsar) from 9am-4pm. Pakistan requires road permit for crossing over to India. India requires international "carnet de passage".

1.12 Ethnic and Sociocultural Groups

Punjabis, from Punjab Province, make up largest cultural group. Through the years they have controlled the government, economy and armed forces.

Other leading groups, in order of size, are: the Sindhis, who form most of the population of Sind Province; the Pathans, divided into various tribes (including the Kakar, Tarin and Panni) that occupy the North-West Frontier Province; and the Baluchis, comprising the many nomadic tribes that live near oases in Baluchistan.

1.13 Languages

Urdu, the official language, is native to 7% of population, but widely spoken, especially in Punjab and Sind. Languages spoken by vast majority, although distantly related to Urdu, are in many cases not mutually intelligible with it or with each other. Punjab native to 64%; Sindhi 12%; Pushtu, Baluchi and Brahui combined, 16%. English, spoken by about 2% of population, remains common medium of government, law, commerce, higher education and the upper classes.

1.14 Education

Primary schooling is free; however, fewer than 50% of school age children are enrolled, and many of these do not complete primary education, especially in rural areas. Literacy rate 22% for aged 5 and over in 1976.

1.15 Religions

Establishment of a Muslim state at time of independence was motivated by fears that Hindu-dominated India would eventually submerge the Islamic community. 97% of population are Muslim, making Pakistan one of the largest Islamic nations in the world. Major sects are the Sunnis, the Shiahs and the Ahmadiyahs: these are further broken down into various splinter groups which vie for power and influence. 1.4% each are Hindu and Christian; 0.01% are Parsis, Persian-descended adherents of Zoroastrianism; 4,000 Buddhists. The constitution guarantees religious freedom.

The practice of purdah, the isolation of women from contact outside their immediate family, is widespread.

2. Government

2.1 National Government

1973 Constitution of the Islamic Republic provides for a federal parliamentary form of government: a bicameral legislature with a 63 member senate, indirectly elected by provincial assemblies and tribal councils for 4 years and the National Assembly of 200 members, elected by direct popular vote (universal adult suffrage) to a 5 year term. An extra 10 seats are reserved for women and 6 for minorities to serve in the National Assembly. Government is presided over by Prime Minister and President, both elected by National Assembly.

Since 1977 country has been governed under martial law by Gen. Mohammad Zia-ul-Haq, who suspended 1973 constitution and postponed elections indefinitely. All legislative bodies and political parties declared dissolved; government currently run by martial law administrators. Previously independent judiciary now subordinate to martial law.

2.2 Regional Organization

Four provinces are divided into divisions, divisions into districts, and districts into tehsils, or in Sind, talukas (revenue or tax regions). In addition, the central government administers the Islamabad capital area, most but not all of the tribal areas of the NWFP, and the Gilgit and Baltistan agencies. Azad (free) Kashmir has a special and anomalous status, due to dispute between Pakistan and India over the area.

2.3 Divisions and Districts

Punjab: Bahawalpur, Lahore, Multan, Rawalpindi, Sargodha.
NWFP: Dera Ismail Khan, Malakand, Peshawar.
Sind: Hyderabad, Karachi, Khairpur.
Baluchistan: Kalat, Quetta.

Districts remain, as under the British raj, the most vital sector of government as far as most citizens are concerned. Tax collection, law and order, administration of justice below the High Court level, and all development projects, with the exception of military affairs, are conducted at this level.

In 1970 the government suspended operations of most elected local officials. Since that time there has been no officially designated, or elected, local government. In larger cities there are appointed groups, and ad hoc committees in rural areas; however, these are generally ineffective.

2.4 Tribal Areas

The provincially administered tribal areas are: Malakand protected area; the tribal area adjoining Hazara district; the former state of Amb; Zhob district; Loralai district (excluding Duki sub-district); Dalband in subdistrict of Chagai district; and Marri and Bugti tribal territories of Sibi district.

The federally administered tribal areas include the tribal areas adjoining the districts of Peshawar; Kohat, Bannu, and Dera Ismail Khan; the Bajaur district in the Malakand division; and the Mohmand, Khyber, Kurram, North Waziristan, and South Waziristan agencies. The tribal agencies adjacent to what are known as the settled districts are administered by the respective deputy commissioners. Each agency, however, is governed by a political agent, who also has under his control a paramilitary unit of the frontier corps. Reporting follows British practice of crossed lines of authority. The deputy commissioner of Peshawar district, for example, is the subordinate of and directly responsible to the commissioner of the Peshawar division, but when the deputy commissioner is acting as the administrator of the tribal area attached to his district, he reports to the Central Ministry of Interior, States and Frontier Regions, and Kashmir Affairs.

The Gilgit and Baltistan agencies are not part of Azad Kashmir, although they were formerly part of Jammu and Kashmir. The two agencies, which are also governed by the Ministry of Interior, States and Frontier Regions, and Kashmir Affairs, cover the huge area of

rugged and inhospitable terrain in northernmost Pakistan, bordering on the People's Republic China.

Azad (free) Kashmir constitutes that part of the state of Jammu and Kashmir that is under Pakistan's control. It consists of three districts: Mirpur, Punch, and Muzaffarabad. Area, administered by Azad Kashmir government seated at Muzaffarabad, has own president, cabinet, and flag. Azad Kashmir, however, is governed and financed by the Pakistan Ministry of Interior, States and Frontier Regions, and Kashmir Affairs.

2.5 Major Government Figures (Sept. 1979)

President.....	Zia-ul-Haq, Mohammad, Gen.
Chief Martial Law Administrator (CMLA).....	Zia-ul-Haq, Mohammad, Gen.
Martial Law Administrator.....	Shamim, Mohammad Anwar, Air Vice Marshall
Martial Law Administrator.....	Niazi, Karamat Rahman, R. Adm.
Attorney General.....	Pirzada, Syed Sharifuddin
Min. of Atomic Energy.....	Zia-ul-Haq, Mohammad, Gen.
Min. of Cabinet Affairs, CMLA's Secretariat & Establishment Division.....	Zia-ul-Haq, Mohammad, Gen.
Min. of Commerce.....	Ishaq Khan, Ghulam
Min. of Communications.....	Baluch, Mohyuddin
Min. of Culture & Tourism.....	
Min. of Defense.....	Talpur, Ali Ahmed
Min. of Defense Production.....	
Min. of Education.....	Khan of Hoti, Mohammad, Ali
Min. of Finance, Planning, Coordination & Chairman of Planning Commission.....	Ishaq Khan, Ghulam
Min. of Food, Agriculture & Cooperatives.....	Janjua, Mohammad Fazil, R. Adm.
Min. of Foreign Affairs.....	Zia-ul-Haq, Mohammad, Gen.
Min. of Housing & Works.....	Haq Khan, Inamul, Air Marshal
Min. of Information & Broadcasting.....	Hamid, Shahid, Maj. Gen. (Retd.)
Min. of Interior.....	Haroon, Mahmud A.

Min. of Labor & Manpower.....	Chishti, Faiz Ali, Lt. Gen.
Min. of Law & Parliamentary Affairs.....	Pirzada, Syed Sharifuddin
Min. of Local Government & Rural Development.....	Mian, Jamal Said, Maj. Gen.
Min. of Northern Areas & Kashmir Affairs....	Chishti, Faiz Ali, Lt. Gen.
Min. of Petroleum & Natural Resources.....	Chishti, Faiz Ali, Lt. Gen.
Min. of Production & Industries.....	Hassan Khan, Ghulam, Lt. Gen.
Min. of Railways.....	Mian, Jamal Said, Maj. Gen.
Min. of Religious Affairs, Minority Affairs & Political Affairs.....	Haroon, Mahmood A.
Min. of Science & Technology.....	Zia-ul-Haq, Mohammad, Gen.
Min. of Shipping, Ports & Export Promotion..	
Min. of States & Frontier Regions.....	Zia-ul-Haq, Mohammad, Gen.
Min. of Water & Power.....	Haq Khan, Inamul, Air Marshal
Min. of State for Export Promotion.....	Habib, Hamid D.
Min. of State for Social Welfare.....	Ali, Mahmud
Adviser to the President for Foreign Affairs.....	Shahi, Agha
Adviser to the President & Chairman of the Pakistan Tourism Development Corp.....	Noon, Begum Viqarun Nisa
Adviser to the President for Constitutional Affairs.....	Rahman, Hamoodur, Justice
Adviser to the President for Higher Education.....	Afzal, M.
Adviser to the President for Overseas Pakistanis.....	Ali, Moazzam

3. Disaster Preparedness

3.1. Host Disaster Plan

Local office of United Nations Development Program (UNDP) coordinates and acts as liaison between foreign donors and Government of Pakistan, works with GOP federal and provincial agencies, gathers periodic data on disasters and reports to foreign donors, appealing for foreign assistance if necessary. Currently (1975) UNDP is considering establishment of permanent disaster coordination cell with at least one senior level Pakistani officer, who would assist GOP in long-range disaster preparedness planning, statistical data collection and donor agency coordination. (See section 3.6, International Disaster Relief Team.)

GOP has flood control plan (floods are primary disaster) to be completed by 1980-81. Plan includes engineering flood control for rivers and improved warning system with weather radar and satellite station installations to predict rainfall in catchment areas. Disaster relief plans underway at federal, provincial capital and district levels. Federal ministries concerned with disaster relief also are preparing disaster relief plans. All plans will be combined in book form upon completion.

Disaster Relief Cell (DRC): Permanent disaster organization in cabinet division of GOP headed by secretary, assisted by joint secretary (overall administrator) and 3 deputy secretaries (planning, funding and storage, repatriation and relief). Each deputy secretary is assisted by 2-4 section officers assigned specific areas. Additional officers and military personnel detailed to DRC on need basis when disaster occurs. DRC budget includes their expenses. Secretaries of federal ministries expedite aid in their respective sections. Each provincial government designates a member of the board of revenue as disaster relief officer. 24-hour emergency control room is activated when disaster occurs; receives current reports from district officers; publishes daily bulletins; maps disaster conditions.

Resources: No specific information available at present. Much of this data considered classified security information by GOP. If and when GOP disaster plan is published, restrictions may be lifted.

Assessment: "Disaster relief operations in this country are usually effective" due to recent improvements in disaster relief capabilities. GOP needs outside aid only for worst disasters.

3.2 US Mission Plan

Mission relies on UNDP coordination in event of disaster: favors permanent disaster coordination cell plan under consideration by UNDP. Mission relief activities within its own agencies organized as follows:

MDRO maintains contact with GOP disaster relief cell to assure awareness of disaster threat or occurrence: in event of disaster, notifies ambassador, offers survey and assessment assistance, evaluates necessity of US aid, maintains contact with other donors to exchange information and determine priorities, reports to AID/W.

Medical services, shelter and survival, engineering, transportation, and rescue and relief personnel receive GOP requests for assistance through MDRO, compare them with MDRT assessments and recommend action to MDRO; prepare request for FDRC if necessary.

Communications personnel expedite cable traffic.

Coordination activities personnel establish and maintain contact with international organizations, other donors and US volags.

Roles of other personnel detailed in disaster assistance handbook.

3.3 Host Contact List

Disaster relief cell headed by Mr. Mohammed Nawaz, Special Secretary, Cabinet Division of federal government. Office telephone: 63515; home: 26491; home address: 210 Shalimar 7/2, Islamabad.

Assisted by:

<u>Name</u>	<u>Title</u>	<u>Assignment</u>	<u>Telephone office/res.</u>
Brig. Sher Ali Baz	Dir-Gen. Disaster Relief/ Joint Secy.	Administration of overall disaster preparedness and relief activities.	62307/614234
S. Roshan Zamir	Deputy Secretary	Planning, coordination between provinces and foreign assistance and post disaster rehabili- tation, etc.	68724/66805
I. A. K. Lodhi	Deputy Secretary	Control of funds, financial releases, stockpiling, ware- houses, etc.	68176/24675
Mohammad Rashid	Deputy Secretary	Repatriation and relief of displaced persons, construction of houses.	67526/42410

Provincial disaster relief officers:

Punjab	M.S. Choudhry Relief Commissioner, Wapda House, Lahore	66825/53122
Sind	Bashir Ahmad Moriani Relief Commissioner Hyderabad	27071/
NWFP	Nawabzada Mohammad Ayub Khan Relief Commissioner Peshawar	5358/5717
Baluchistan	Nawabzada Jehangir Shah Jogeza Relief Commissioner Quetta	70453/74105

Following officials, who have attended OFDA disaster preparedness seminar, can be called on by DRC if disaster occurs:

<u>Name</u>	<u>Current title and position</u>	<u>Telephone office/res.</u>
Ferozuddin Ahmed	Additional Secretary Finance Division Government of Sind, Karachi	512620/
Khalid Ahmad (CENTO sponsored)	Project Director Office of the Relief Commissioner, Lahore	65388/
Allah Bux Soomro	Commissioner Sukkur division, Sukkur	
Mohammad Rashid	Deputy Secretary (DRC) Cabinet Division Rawalpindi	67526/42410

3.4 US Contact List

Mission Disaster Relief Officer	John H. Bierke Chief, Public Service Division USAID/Islamabad 24071 x 310
Alternate MDRO	James D. Murray Education Officer AD/PS, USAID/Islamabad 24071 x 316; res. 26992
Chief of Mission	Arthur W. Hummel, Jr. Ambassador 26161 x 300; res. 20477

3.5 Mission Disaster Relief Team

<u>Functions</u>	<u>Suggested Name</u>	<u>Agency</u>	<u>Phone *</u>
Food and Water	Richard R. Newberg	USAID	237/24796
Medical Services	Lee B. Milton	USAID	240/23049
Shelter & Survival Supplies	George E. Rusinak	USAID	240/22985
Engineering, Sanitation, Electrical Problems, Debris Clearance, Building Inspec- tion & Condemnation, Road and Bridge Inspection and Clearance	James G. Cassanos	USAID	231/23657
Communications	Richard W. Smith	State	270/21635
Consular Affairs	Karen R. Longeteig	State	230/24234
Transportation and Logistics, Fuel Supplies and Distribution	George E. Rusinak	USAID	240/22985
Rescue and Relief Assessment/Operation	Col. Richard F. Gibbs	DOD Rep	310/21693
Coordination Activities	George D. Matthias	USAID	310/24223
Security	Brendon P. O'Hanlon	State	395/22364
Monitoring Overall Activity	Hobart Luppi	State	301/21953
Administrative and Reporting	Charles D. Matthias	USAID	310/24223
Information	Frank A. Chiancone	USIS	68001/23458
Clerical and Typing	PSD Staff		

<u>Functions</u>	<u>Suggested Name</u>	<u>Agency</u>	<u>Phone *</u>
Alternate MDRO	James D. Murray	USAID	316/26992

*First three digits represent office phone, last five represent home phone.

US government agencies:

US Embassy, Diplomatic Enclave, Islamabad
 Arthur W. Hummel, Jr. Ambassador 26161-26180
 David C. Fields, Counselor for Admin.

77 Americans, 121 Pakistanis, 40 vehicles
 consulates in Peshawar, Lahore, Karachi

Agency for International Development, UN Building, 6th
 Avenue Ramna 5, Islamabad 24071-24077
 Joseph C. Wheeler, Director 24071x200/res. 22882
 George E. Rusinak, ADM 24071x240/res. 222985

45 Americans, 265 Pakistanis, 51 vehicles

US Information Service, Main Center, Kashmir Road, Rawalpindi
 68011-68009

Charles E. Courtney, Counselor for Public Affairs
 26161x270/res. 23264

8 Americans, 42 Pakistanis, 13 vehicles
 other centers in Peshawar, Lahore, Karachi

3.6 International Disaster Relief Team

United Nations Development Program (UNDP) Cable: UNDEVPRO
 UN Building Telex: 952886
 6th Avenue, Ramna 5 Phone: 20141-5
 Islamabad

Jacob Everts, Resident Representative off: 22618/res: 22201

World Health Organization (WHO)
UN Building
6th Avenue, Ramna 5
Islamabad

off: 22316/res: 27254

Dr. Awarie Arif, WHO Representative

off: 22316/res: 27254

UNICEF
UN Building
6th Avenue, Ramna 5
Islamabad

Assadi Baiki, UNICEF Representative

off: 23564/res: 21697

World Food Program (WFP)
UN Building
6th Avenue, Ramna 5
Islamabad

W.J. Barnsdale, WFP Senior Advisor

off: 23365/res: 22616

International Committee of Red Cross
440 Bazar Road
Ramna 6/4
Islamabad

Martin Michael, Chief Delegate

off: 22681/res: 22685

3.7 US Voluntary Agencies (Volags)

<u>Agency</u>	<u>Intl/Local Staff</u>	<u>Programs</u>
Afghan Border Crusade	6/8	Ed; Med & PH
Asia Foundation	2/14	Ed
Associate Reformed Presbyterian Church		Ag; Med & PH; Pop & Fam Serv; Women
Care	4/35	CHP; Med & PH; Women
Catholic Relief Services	1/1	CD; Food Prod & Ag; Med & PH
Church World Service	2/-	Ed; Equip & Mat Aid; Med & PH
Conservative Baptist Foreign Mission Society	7/-	Med & PH
Evangelical Alliance Mission	49/-	Ed; Med & PH
Farmers and World Affairs	4/-	Ed
Ford Foundation	7/28	Ec & Dev Pl; Ed; Food Prod & Ag; Pop & Fam Serv;
Map International	-	Equip & Mat Aid; Med & PH
Medical Mission Sisters	16/?	Med & PH; Women
Mill Hill Missionaries	33/46	CHP; Ed; Food Prod & Ag; Med & PH
Salvation Army	17/	Ed; Med & PH; SW; Youth
United Methodist Church	8/-	CD; Ed; Food Prod & Ag; Ind Dev; Med & PH; Pop & Fam Serv
United Presbyterian Church	47/387	Comm; CD; Ed; Med & PH
World Education	-/50	Ed
World Mission Prayer League	24/-	Ed; Med & PH
World Wide Missions	-/2	Med & PH
YMCA	-/20	CD; Youth
YWCA	?	CD; Ed; Med & PH; SW; Women; Youth

Key

Comm	Communications
CD	Community Development
CHP	Construction, Housing, Planning
Ec & Dev Pl	Economic and Development Planning
Ed	Education
Equip & Mat Aid	Equipment and Material Aid
Food Prod & Ag	Food Production and Agriculture
Ind Dev	Industrial Development
Med & PH	Medicine and Public Health
Pop & Fam Serv	Population and Family Services
SW	Social Welfare

3.8 Pakistani Voluntary Agencies (Volags)

Pakistani Association of the Blind
 Pakistani Council for Child Welfare
 Pakistani Girl Guides Association
 T.B. Association
 Pakistan Boy Scouts Association
 All Pakistan Women's Association
 National Federation for the Welfare of Blind
 Pakistan Red Crescent and St. John Ambulance Society

3.9 Disaster Types and History

Flood an dearthquake prone areas mapped; copies attached to mission plan.

Disaster types: floods, earthquakes, drought, epidemics, locust invasion, border conflict, landslides, tsunamis.

Summary Disaster History

<u>Disaster</u>	<u>Location</u>	<u>Strike Date</u>	<u>No. Killed</u>	<u>No. Victims</u>	<u>Dmg (\$000)</u>
Karachi fire	Karachi	2/09/70	0	1,105	\$60
Disp Pers	W. Pakistan	1/00/72	0	1,200,000	\$0
Disp Pers	Punjab, Sind, Azad	73	0	1,200,000	\$100,000
Floods	Punjab and Sind	8/00/73	474	4,800,000	\$661,000
Earthquake	N Indus R Valley	12/28/74	4,700	70,000	\$3,255
Heat Wave	Nationwide	6/00/75	14	n.a.	n.a.
Flood	Punjab, Sind, NWFP	8/02/76	388	5,566,000	\$505,000
Floods	Karachi, Malir & Lyari	7/01/77	350	20,000	n.a.
Floods	Punjab region	7/16/77	25	171,000	n.a.
Floods	Nationwide	8/00/78	279	2,143,849	n.a.

4. Population

4.1 National Demographic Characteristics

In January 1979 population estimated at 78,978,000 excluding Junagadh, Manauadar, Gilgit, Baltistan and the disputed area of Jammu and Kashmir (World Bank). Density: 227/sq mile; lowest in Baluchistan averaging 19/sq mile, highest in urban centers of the Punjab and Sind.

Average annual growth rate: 3.0%
 Urban population: 26%
 Population under 15 years: 45%

4.2 Regional Distribution

Population By Province/Division and Density (1972 Census)

<u>Province/Division</u>	<u>Area In Square Miles</u>	<u>Population</u>	<u>Density Per Sq Mile</u>
Pakistan	307,374	64,979,732	211
N.W.F.P.	28,773	8,337,385	290
Peshawar	10,745	5,498,137	512
Dera Ismail Khan	5,172	1,041,412	201
Malakand	12,855	1,797,836	140
Centrally Administered Tribal Areas	10,510	2,485,867	237
Federal Capital Territory (Islamabad)	350	235,749	674
Punjab	79,284	37,507,855	473
Rawalpindi	10,856	5,671,414	522
Sargodha	17,095	8,980,236	525
Lahore	8,906	9,795,042	1,100
Multan	24,824	9,508,008	383
Bahawalpur	17,602	3,553,155	202

<u>Province/Division</u>	<u>Area In Square Miles</u>	<u>Population</u>	<u>Density Per Sq Mile</u>
Sind	54,407	14,007,722	257
Sukkur	19,256	5,045,373	262
Hyderabad	33,790	5,372,356	159
Karachi	1,362	3,589,993	2,636
Baluchistan	134,050	2,405,154	18
Quetta	54,058	1,306,001	24
Kalat	79,992	1,099,153	14

NB: Non-Pakistanis are excluded

Source: Statistics Pocket-Book of Pakistan 1978.

World Bank Estimates for population in 1978:

Baluchistan	2,800,000
NWFP	12,600,000
Punjab	43,667,000
Sind	16,308,000
Federal Capital	274,000
Total	75,649,000

Source: World Bank, Pakistan Economic Developments, 1979.

Urban and Rural Areas by District (1972 census)

<u>Province/District</u>	<u>Total</u>	<u>Urban</u>	<u>Rural</u>
Pakistan	64,979,732	16,553,677	48,426,055
N.W.F.P.	8,337,385	1,189,214	7,148,171
Peshawar Division	5,498,137	906,306	4,591,831
Hazara District	2,007,575	142,220	1,865,355
Mardan District	1,198,000	194,681	1,003,319
Peshawar District	1,711,368	476,824	1,234,544
Kohat District	581,194	92,581	488,613

	<u>Total</u>	<u>Urban</u>	<u>Rural</u>
Dera Ismail Khan Division	1,041,412	148,812	892,600
Dera Ismail Khan District	477,837	90,663	387,174
Bannu District	563,575	58,149	505,426
Malakand Division	1,797,836	134,096	1,663,740
Dir District	522,068	---	522,068
Chitral District	158,976	19,438	139,538
Swat District	934,338	50,922	883,416
Malakand Agency	182,454	63,736	118,718
Centrally Administered Tribal Areas	2,485,867	9,069	2,476,798
Tribal area adjoining Peshawar District	60,132	---	60,132
Tribal area adjoining Kohat District	322,997	---	322,997
Tribal area adjoining Khan District	76,472	---	76,472
Tribal area adjoining Bannu District	63,882	---	63,882
Malakand Agency (Bajaur)	364,050	---	364,050
Mohmand Agency	382,922	---	382,922
Kyber Agency	377,001	---	377,001
Kurram Agency	280,234	9,069	271,165
North Waziristan Agency	250,663	---	250,663
South Waziristan Agency	307,514	---	307,514
Federal Capital Territory (Islamabad)	235,749	77,318	158,431
Punjab	37,507,855	9,179,994	28,327,861
Rawalpindi Division	5,671,414	1,342,823	4,328,591
Campbellpur District	983,355	123,597	859,758
Rawalpindi District	1,754,663	772,562	982,101
Jhelum District	1,048,032	167,032	881,000
Gujrat District	1,885,364	279,632	1,605,732

	<u>Total</u>	<u>Urban</u>	<u>Rural</u>
Sargodha Division	8,980,236	2,070,884	6,909,352
Sargodha District	2,093,661	495,206	1,598,455
Mianwali District	1,097,705	235,890	861,815
Lyallpur District	4,240,224	1,052,166	3,188,058
Jhang District	1,548,646	287,622	1,261,024
Lahore Division	9,795,042	3,637,419	6,157,623
Lahore District	3,772,172	2,421,538	1,350,634
Gujranwala District	2,048,746	590,224	1,458,522
Sheikhupura District	1,635,831	242,356	1,393,475
Sialkot District	2,338,293	383,301	1,954,992
Multan Division	9,508,008	1,530,705	7,977,303
Dera Ghazi Khan District	1,133,865	145,868	987,997
Muzaffargarh District	1,553,642	120,016	1,433,626
Multan District	4,011,794	879,855	3,131,939
Sahiwal District	2,808,707	384,966	2,423,741
Bahawalpur Division	3,553,155	598,163	2,954,992
Bahawalpur District	1,072,975	225,313	847,662
Bahawalnagar District	1,078,513	168,241	910,272
Bahim Yar Khan District	1,401,667	204,609	1,197,058
Sind	14,007,722	5,700,426	8,307,296
Sukkur Division	5,045,373	911,700	4,133,673
Jacobabad District	694,792	109,021	585,771
Sukkur District	1,368,595	339,404	1,029,191
Larkana District	922,907	160,990	761,917
Nawabshah District	1,341,706	188,556	1,153,150
Khairpur District	717,373	113,729	603,644
Hyderabad Division	5,373,356	1,290,091	4,082,265
Hyderabad District	2,207,873	807,168	1,400,705
Dadu District	807,753	101,217	706,536
Tharparkar District	1,000,972	164,276	836,696
Sanghar District	681,168	130,680	550,488
Thatta District	674,590	86,750	587,840

	<u>Total</u>	<u>Urban</u>	<u>Rural</u>
Karachi Division	3,589,993	3,498,635	91,358
Karachi District	3,589,993	3,498,635	91,358
Baluchistan	2,405,154	397,656	2,007,498
Quetta Division	1,306,001	265,582	1,040,419
Quetta District	494,928	186,479	308,449
Sibi District	402,977	35,520	367,457
Loralai District	184,797	12,537	172,260
Zhob District	161,127	20,787	140,340
Chagai District	62,172	10,259	51,913
Kalat Division	1,099,153	132,074	967,079
Kalat District	320,519	20,146	300,373
Kachhi District	266,041	22,427	243,614
Kharan District	75,509	6,082	69,427
Makran District	301,109	74,386	226,723
Lasbala District	135,975	9,033	126,942

NB: Non-Pakistanis are excluded.

Source: Statistics Pocket-Book of Pakistan 1978.

4.3 Migration

Prior to 1971 civil war, migration was largely limited to Hindus moving to India and some Muslims migrating from India to Pakistan. According to GOP estimates about 100,000 Pakistanis (mostly professionals and skilled workers) emigrate each year. As of 1976 there were an estimated 100,000 Pakistanis in Britain, 50,000 in the United Arab Emirates and 30,000 in Kuwait.

5. Health, Nutrition and Housing

5.1 Overall Health Status

Health conditions have not improved much since nation was established in 1947. Malaria, tuberculosis and cholera continue to constitute major threats to health; gastrointestinal infections and other parasitic diseases are endemic. These diseases are exacerbated by primitive water supplies and waste disposal, sub-standard housing, widespread malnutrition and nutritional deficiencies, and an increasingly high population growth.

Three fundamental causes of Pakistan's poor health environment are widespread infections and communicable diseases; poverty and sociocultural attitudes that inhibit improving the environment; and ineffective policies administered by limited numbers of poorly trained health workers, affecting both the urban poor and the rural population. There is pervasive ignorance of Western medicine and fatalistic acceptance of the inevitability of mortality. Great reliance on the traditional hakims, most of whom cannot administer effective treatment.

5.2 Summary of Diseases

Major health problem is malaria. After the malaria control eradication program was halted in 1969, a dramatic resurgence occurred in 1974, with an estimated 10 million cases. Transmission March-October; highest when monsoon rains are heaviest and in poorly drained areas.

Frequent outbreaks of cholera with Lahore, Sialkot and Gujranwala most severely affected. TB a massive public health problem with an estimated total of over 1 million active cases. Trachoma reported to affect 30-70% of population (major cause of blindness). Over 2,000 reported cases of poliomyelitis in 1976; vaccination available only in large cities.

Although there is insufficient data available to document prevalence, other diseases include: dysentery, typhoid, paratyphoid fevers, tetanus, meningitis, measles, diphtheria, whooping cough,

tickborne typhus, leprosy and scarlet fever. Last case of smallpox 1974; disease declared eradicated.

5.3 Vital Statistics

Statistics are said to have little meaning. Incidence of death and disease is much higher than reports indicate and there has been a deliberate underreporting of women in the census.

Birth rate	44/1000 population
Death rate	14/1000 population
Infant mortality	136/1000 live births
Growth rate	3.0%
Life expectancy	51 years
Mortality ages 1-4	17/1000
Population over 64 yrs	3%
Population under 15 yrs	46%

Source: World Bank, Pakistan Economic Developments, 1979.

5.4 Health Services and Facilities

There is a central ministry of health, but health care is essentially a provincial concern with a three-tiered structure: province, district and subdistrict. In practice this system is barely functional due to administrative problems and a lack of delineation of function and responsibility among federal, provincial and local administrations. 15-20% of total population has access to minimum medical care; 5% in rural areas.

The semi-public and/or private sectors are diverse: Institute of Social Security, universities, Water Power Development Authority, town councils, armed forces, jails, airlines, etc., all maintain their own health services.

Number of Health Facilities and Beds by Province (1977)

<u>Province</u>	<u>Hospitals</u>	<u>Dispensaries</u>	<u>Maternity & child welfare centers</u>	<u>Beds in hospitals & dispensaries</u>
Punjab	235	1,246	459	18,320
Sind	128	1,003	118	11,292
N.W.F.P.	140	556	95	6,314
Baluchistan	29	398	49	2,098
Total	532	3,203	721	38,024

Source: Statistics Pocket-Book of Pakistan 1978.

5.5 Health Personnel

There is an acute shortage of trained medical personnel, particularly auxiliary staff. 80% of physicians live in urban areas while 70% of the population lives in rural areas (ratio of doctors to population in rural areas is 1/25,000; average is 1/4,000). The ratio of nursing personnel per population is 1/23,000 and there is one lady health visitor for every 70,000 people. Due to the lack of trained personnel, the rural population is forced to rely on approximately 40,000 traditional healers (hakims and vaidis) who practice traditional methods using herbs.

Medical Personnel (1977)

Registered doctors	19,922	Midwives	4,103
Nurses	7,186	Assistant midwives	3,606
Qualified lady health visitors	1,738	Physical therapists	157
Medical assistants	1,621	Medical laboratory technicians	94
Dentists	809	Sanitary inspectors	1,775
Pharmacists	1,245	Malaria field officers	698
Dispensers	14,875		

Source: WHO, World Health Statistics Annual 1978.

5.6 Family Planning

With a population growth rate of 3.0+ %, Pakistan has an urgent need to control growth; however, past attempts at family planning have had no significant success. In an attempt to discover innovative and effective methods in population planning, the government has established a research and development cell responsible for investigating new ways of delivering, and creating demand for, contraceptive services.

5.7 Diet Summary

Minimum daily requirement: 2,232 calories (FAO). Estimated caloric intake has been variously reported as: 2,410; 2,290; 1,800 in urban areas; 2,125 in rural areas.

Generally, diet is inadequate and unbalanced, particularly for females and preschool children. Choice food tends to go to men. The average Pakistani consumes 450 g of cereal daily; grains and pulses provide 70% of consumed calories; only 11% comes from animal sources.

Problems of distribution, food preservation methods, and cultural eating patterns contribute to dietary deficiencies. Distribution of food is variable according to income, with the poor getting only a fraction of the average. Excessive population growth, inflation and, in recent years, food shortages, exacerbate nutritional problems.

Taboos: Observant Muslims do not eat pork and do not drink liquor.

5.8 Staple Foods

Grains: Flour from sorghum, millet, maize used to make flat unleavened bread, baked on a griddle, that forms basis of diet for most of population. Preferred grain for those who can afford it is wheat. Rice, either plain or as pilaf, is also widely consumed.

Cooking oil: Ghee (butter oil), hydrogenated vegetable oil (cottonseed and soybean), crude rapeseed oil for cooking, frying, etc.

Vegetables: Spinach, rapeseed/mustard greens, cauliflower, carrot, radish, turnip, eggplant, squash, pumpkin, gourds, potatoes, okra, green peas, tomatoes, cucumbers, garlic, onion, chillies, green coriander leaf - fresh, used in curry, or salad.

Fruits: Mangoes, guavas, bananas, oranges, dates, jujubes, watermelons, cantaloupes - fresh, out of hand.

Milk: Buffalo, cow, sheep, goat - fresh, as liquid milk (boiled and sweetened); as yogurt or buttermilk; used in tea; used to make sweet dishes.

Meat/Fowl: Mutton, beef - fresh, in curry. Domestic fowl - fresh, in curry.

Fish: Fish is a rarity in rural areas. When available used in curry, or fried.

Liquids or Beverages: Milk, buttermilk, tea boiled with milk and sugar.

5.9 Nutritional Deficiencies

Malnutrition is widespread, affecting close to 60% of children under age 5 and accounting for a 25% mortality rate among children; 50% of entire population is malnourished.

Vitamin A deficiency; widespread and common to all income and geographic groups. Among adults, 3.26% of pregnant and lactating women and 39% of women of childbearing age have Bitot's spot, a sign of vitamin A deficiency.

Riboflavin: almost 100% of Pakistani families consume less than recommended level.

Vitamin C: widespread deficiency, especially prevalent among low income groups and in urban areas. About 50% of population consumes less than recommended allowance.

Anemia: Some 36% of rural and 56% of urban population suffer from anemia.

Goiter: incidence not widespread; however it is common in isolated areas particularly in the northeast (fortification of salt with iodine under way).

Source: Synchysis XXIV: Pakistan, 1978.

5.10 Utensils and Cooking

Fingers of right hand only are used for eating food. Occasionally tea/tablespoon may be used for eating rice or a dessert.

Food is cooked on a hearth surrounded by bricks on three sides; fuels used are wood, buffalo/cow dung patties, cotton sticks, sugarcane trash/baggasse or tree prunings. Most cooking is done outside except in very hot weather.

5.11 Housing

Rural: varies from region to region, depending on climate and local customs. Most villages consist of clusters of two or three-room houses made of clay or sundried mud. Few communities have sanitation facilities, electricity or access to potable water. Lack of sanitation contributes to poor water quality.

Urban: great range exists in quality and kinds of structures. Urban housing shortage, due to high birth rate and rural migration, has created vast slum areas; shanties of scraps of wood, pieces of gunny-sack, cardboard, straw or sticks supplemented by mud and stones and roofed with straw or occasionally corrugated iron. Slums are generally in low-lying areas and are often destroyed by flooding. 30% of urban population has access to potable water, 15% access to sewerage.

6. Economy

6.1 Overview of Economy

GNP for FY 1977/78 - US \$17.98 billion; average annual growth rate (1973/74 - 1977/78) - 4.2%; per capita income (1976) - US \$170 for rural population. Agriculture employs 55% of population directly and is the basis for service, commercial and industrial occupations of an additional 20%. Agriculture is major source of export earnings: cotton (raw, yarn and fabrics) and rice. Manufacturing, commerce and services provide employment for 14%, 11% and 10% of population respectively. Agriculture contributes 29% of GNP, manufacturing 14% and commerce 13%. Major industries are cement, fertilizers, chemicals and steel products.

Economy is government-planned with increasing nationalization of major industries: iron and steel; heavy engineering and electrical equipment; motor vehicle and tractor manufacture; chemicals; public utilities; and vegetable ghee production. Banking, life insurance and shipping are also government owned and controlled.

Problems confronting the Pakistani economy include: low levels of agricultural productivity, despite widespread use of high yield varieties of grain; poor industrial productivity; rapid population growth; inadequate social services; shortage of resources; and inadequate planning and management systems.

6.2 GNP (1977/78)

GNP	US \$17.98 billion
Annual growth rate	4.2% (1973/74 - 1975/78)
Per capita income	\$170
Rural per capita income	less than \$100
Agricultural output	\$4.9 million
Agricultural growth rate	2.5%
Industrial output	\$3.6 million
Industrial growth rate	3.0%

Source: World Bank, Pakistan Economic Developments, 1979.

6.3 Industry

Main industries are agricultural processing, textiles, cement, iron and steel products (based partly on imported coke and iron ore), tires, petroleum products, machinery and fertilizer. Industrial production has shown a increase in 1977/78 (7.4%) for the first time since a temporary commodity boom in 1973-74. Of particular importance is a revival in the textile industry (average prices received in first half of 1979 are 15-20% over 1977/78 average). Trend has been toward production of finished goods for sale in Asia rather than raw materials aimed at Western Europe and the US.

Production of Selected Manufacturing Industries

	Unit	1973/74	1974/75	1975/76	1976/77	1977/78
<u>Food/Tobacco</u>						
Sugar	'000 MT	608.0	502.3	630.5	736.3	859.8
Vegetable ghee	'000 MT	225.4	271.9	277.4	325.9	354.2
Sea salt	'000 MT	110.7	139.1	151.4	137.1	215.1
Cigarettes	bil. units	27.5	26.8	27.5	28.4	31.3
<u>Textiles</u>						
Cotton yarns	mil. kgs	379.5	351.2	349.7	282.6	297.0*
Cotton cloth	mil. sq.m	592.2	555.9	520.3	408.3	393.9*
Rayon cloth	mil. m.	8.7	8.1	9.9	17.5	15.6
Board	'000 MT	35.9	27.2	21.0	21.4	22.3
<u>Chemical</u>						
Urea	'000 MT	575.5	599.5	405.3	593.6	594.9
Superphosphate	'000 MT	22.6	11.7	58.6	66.1	75.0
Ammonium sulphate	'000 MT	90.4	95.1	98.3	100.0	95.6
Ammonium nitrate	'000 MT	63.5	58.8	70.8	64.5	47.1
Soda Ash	'000 MT	81.2	77.1	78.6	55.1	68.8
Caustic soda	'000 MT	37.5	36.8	38.3	23.6	31.1*
Sulphuric acid	'000 MT	34.0	37.0	46.2	45.2	50.9*
Chlorine gas	'000 MT	6.4	4.9	5.5	4.7*	4.9*
Paint/varnishes	mil. li	6.1	6.2	7.1	7.2	7.6
Matches (gross boxes)	mil.	368.3	466.8	589.6	769.0	1,136.9

	<u>Unit</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
<u>Rubber</u>						
Cycle Tires, Tubes	mil. units	7.1	7.2	7.4	7.6	7.8*
<u>Cement</u>	mil. MT	3.1	3.3	3.2	3.1	3.2
<u>Small Machinery and Metal</u>						
Metal						
Steel products	'000 MT	218.1	224.0	230.7	258.6	315.3
Electric fans	'000 u.	190.9	193.1	148.1	166.6	196.3
Bicycles	'000 u.	178.5	210.4	217.8	211.5	244.7
Sewing machines	'000 u.	75.5	55.5	64.0	58.4	61.9*

*Estimate

Source: Ministry of Finance and Economic Affairs, as cited in World Bank, Pakistan Economic Developments, 1979.

6.4 Current Economic Status (1979)

GDP rose more than 6% during 1977/78, the first sustained growth since 1973/74. This growth reflects increased government investment in the private sector, improved agricultural production, continued growth in construction and services, and an increase in workers' remittances from abroad that has sustained growth rates of incomes well above those for output.

However, the temporary caretaker role of the present military government, especially in view of its lack of popular mandate, contributes to a short-term outlook and hinders development planning and institutional change. Development emphasis continues to be on major production facilities and large infrastructure projects. Agricultural programs benefit primarily large scale farms, although the new 5-year plan addresses educational and health problems of the poor majority, in addition to traditional social programs.

6.5 Balance of Payments

Increasingly high levels of workers' remittances from abroad reduced current account deficit from over \$1 billion to \$600 million; net short term borrowing dropped to \$70 million from \$120 million and gross international reserves rose from \$300 million to \$722 million.

Nevertheless, the imbalance between government objectives and available resources, and problems of fiscal and monetary management may worsen balance of payments by 1979/80 and undermine current industrial recovery (textiles, ghee, cement, fertilizers and chemicals still showed gains in 1977/78). Continued low levels of agricultural productivity (growth in agricultural output absorbed by population increases), especially in light of rising consumption levels are cause for concern.

Balance of Payments (US\$ Million)

	<u>Actual</u> <u>1977/78</u>	<u>Estimated</u> <u>1978/79</u>	<u>Projected</u> <u>1979/80</u>
Merchandise exports (fob)	1,287	1,600	1,750
Merchandise imports (fob)	-2,751	-3,640	-3,820
Trade balance	-1,464	-2,040	-2,070
Workers' remittances	1,166	1,300	1,350
Other receipts	495	526	547
Freight and insurance payments	-290	-338	-355
Interest on debt(a)	-150	-205	-283
Other payments	-358	-460	-500
Net invisibles	863	823	759
Current account balance	-601	-1,217	-1,311
Amortization payments(b)	-167	-297	-405
Financing required	-768	-1,514	-1,716

(a) Excluding interest payments to IMF.

(b) Reflects rescheduling of payments due Iran of \$116 million in 1977/78 and \$113 million in 1978/79.

Source: Ministry of Finance and Economic Affairs, as cited in World Bank, Pakistan Economic Developments, 1979.

6.6 Imports

Due to poor 1977/78 wheat harvest, a massive increase in grain imports took place in 1978/79. However, if wheat production recovers, and domestic fertilizer production increases, imports for 1979/80 should be substantially lower. Edible oil production has also been down due to poor performance of cotton crops. Consumption has risen at an average rate of over 9% during the past 8 years and imports have doubled.

Pakistan is dependent on fuel oil imports for 39% of her commercial energy needs. This is likely to increase unless new supplies of domestic oil are found and/or alternative energy sources are developed. The current 5-year plan accordingly gives high priority to energy development.

Major suppliers (1977/78): Japan, USA, W. Germany.

Value, Volume and Unit Value of Major Imports

	<u>1976/77</u>			<u>1977/78</u>		
	value (mil. \$)	quantity (000 ton)	unit value (\$/ton)	value (mil. \$)	quantity (000 ton)	unit value (\$/ton)
Oil crude	273.8	2,710.8	101.0	341.4	3,314.8	103.0
Products	132.6	1,127.4	117.6	155.4	1,281.6	121.3
Wheat						
unmilled	66.7	499.0	133.6	135.0	1,035.0	130.5
Fertilizers	63.0	399.6	157.6	103.8	594.6	175.0
Edible oil	149.3	284.0	525.7	148.0	248.8	594.7
Tea	75.9	51.1	1,485.5	127.1	61.0	2,084.6
Other						
Imports	1,626.1			1,788.3		
Total						
Imports	2,324.5			2,798.9		

Source: World Bank, Pakistan Economic Developments, 1979.

6.7 Exports

Cotton and cotton products most important export item; rice second. Prospects for 1979/80 export growth depends on recovery of cotton production and general economic stability. Increase in manufacture and demand for items such as carpets would have favorable impact on export trade.

Major purchasers (1977/78): Japan, UK, Hong Kong, Germany, USA.

Value and Volume of Major Exports

	Volume Unit	1976/77		1977/78	
		Value (mil. \$)	Volume (000 Units)	Value (mil.\$)	Volume (000 Units)
Raw cotton	lb	29.5	39,161.0	110.1	214,753.0
Cotton yarn	lb	118.4	146,582.0	107.0	132,177.0
Cotton cloth	sq/yd	162.0	498,538.0	175.9	542,351.8
Rice					
Fine qual.	ton	173.4	510.5	124.0	271.6
Medium qual.	ton	18.0	92.4	46.7	175.7
Coarse	ton	43.7	245.0	61.7	282.8
Broken	ton	12.4	80.2	11.5	57.2
Leather	ton	65.4	91,925.0	64.3	8.6
Carpets	sq/ft	91.4	18,075.0	118.3	20,916.0
Fish	ton	38.5	18.0	34.5	13.2
Petrol products	ton	23.5	241.6	63.2	624.7
Cement	ton	0.6	13.2		
Sport goods		20.1		19.7	
Other		343.0		374.1	
Total Exports		1,140.8		1,310.8	

Source: World Bank, Pakistan Economic Developments, 1979.

7. Agriculture7.1 Overview of Agriculture

Agriculture accounts for 32% of GDP, employs 55% of labor force (additional workers are employed in processing and distribution of agricultural products) and provides nearly two-thirds of total exports. Major products are wheat, rice, cotton and sugarcane; others include pulses, oilseeds, tobacco, fruits and vegetables. Principal food grains are wheat, rice, corn, millet, sorghum and barley; the last three are particularly important because they require little water but are less frequently planted as they are not preferred foods.

Pakistan has world's largest system of integrated irrigation covering 48 million acres of land under crops (71% of total). Irrigated areas in Indus Basin, Peshawar Valley and flat plains of the Punjab and Sind account for bulk of harvest (38 million acres). Another 10 million acres are cultivated as "barani" area (rain-fed) or by small irrigation canals. Common side effects of irrigation are water-logging and salinity.

Agricultural Production

	<u>(Unit)</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
<u>Cereals</u>						
Rice	000 tons	2,416	2,277	2,576	2,694	2,902
Wheat	000 tons	7,508	7,552	8,552	8,999	8,158(a)
Bajra (millet)	000 tons	346	261	303	306	313
Jowar (sorghum)	000 tons	372	261	276	257	280
Maize	000 tons	755	735	790	752	808
Barley	000 tons	137	135	128	122	119
<u>Pulses</u>						
Gram	000 tons	601	542	592	639	604
Mash	000 tons	22	26	29	29	27
Masoor	000 tons	33	26	28	30	33(a)
Mung	000 tons	31	28	31	29	30
Other pulses	000 tons	136	83	91	107	-

	(Unit)	1973/74	1974/75	1975/76	1976/77	1977/78
<u>Oilseeds</u>						
Rape & mustard	000 tons	288	244	263	292	242 (a)
Sesamum	000 tons	12	8	11	12	13
Cottonseed	000 tons	1,296	1,248	1,011	856	1,131
Groundnuts	000 tons	53	56	61	63	71
<u>Cash crops</u>						
Cotton (lint)	000 bales	3,704	3,567	2,890	2,446	3,233
Sugarcane	000 tons	23,533	20,906	25,143	29,057	29,607
Tobacco	mln. pds	145	169	128	160	164 (a)
<u>Condiments & Spices</u>						
Onions	000 tons	236	298	31	326	320 (a)
Garlic	000 tons	23	24	16	18	n.a.
Chillies	000 tons	50	51	78	77	n.a.
<u>Vegetables</u>						
Potatoes	000 tons	235	286	316	313	291 (a)
Other vegetables	000 tons	1,688	1,674	1,500	1,304	n.a.

(a) Provisional

(b) Revised

n.a. Not available

Source: Ministry of Food, Agriculture and Cooperatives, as cited
in World Bank, Pakistan Economic Developments, 1979.

7.2 Crop Dates

<u>Crop</u>	<u>Harvest Period</u>	<u>Bulk of Harvest</u>
Wheat	Mar-June	Apr-May
Barley	Mar-June	Apr-May
Maize	Aug-Dec	Oct-Nov
Bajra (millet)	June-Nov	Nov
Jowar (sorghum)	Aug-Nov	---
Rice		
Autumn	July-Sept	July-Aug
Winter	Sept-Jan	Oct-Dec
Summer	Apr-May	Apr-May
Sugar cane	Oct-Jun	Dec-Feb

<u>Crop</u>	<u>Harvest Period</u>	<u>Bulk of Harvest</u>
Potatoes		
Autumn	Dec-Feb	---
Spring	Apr-May	
Hill crop	June-Nov	---
Onions	Mar-June	Apr-June
Garlic	Feb-May	Feb-Apr
Chickpeas	Mar-May	Apr
Lentils	Feb-Apr	---
Dry beans		
Mash (<i>Phaseolus mungo</i>)	Oct-Feb	Nov-Feb
Mung (<i>Phaseolus aurens</i>)	Oct-Feb	Oct-Dec
Fruits	---	---
Groundnuts	(Mar-Apr & Sept-Dec)	---
Linseed	Feb-Apr	mid Feb-Mid Mar
Rapeseed & mustard seed	Jan-Apr	---
Sesame seed		
Winter	Oct-Jan	Nov-Dec
Summer	Sept-Oct	---
Tea	Mar-Dec	July-Early Oct
Tobacco	Mid Feb-July	Mid Feb-Mar
Tobacco (late snow)	Sept-Dec	---
Cotton	Sept-Jan	Oct-Dec
Sunhemp	Sept-Apr	Feb-Apr
Jute	July-Oct	Aug-Sept

Source: FAO, World Crop Harvest Calendar.

7.3 Acreage Under Cultivation

	<u>Acreage Under Cultivation</u> (000 acres)				
	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
<u>Cereals</u>					
Rice	3,736	3,964	4,225	4,323	4,692
Wheat	15,105	14,363	15,100	15,790	15,799 (a)
Bajra (millet)	1,812	1,347	1,542	1,601	1,584
Jowar (sorghum)	1,456	1,100	1,176	1,105	1,284
Maize	1,563	1,516	1,532	1,542	1,621
Barley	506	479	459	431	412

	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
<u>Pulses</u>					
Gram	2,738	2,462	2,640	2,705	2,716
Mash	109	128	144	122	131
Masoor	238	186	180	196	227(a)
Mung	169	154	166	160	161(a)
Other pulses	766	471	518	603	n.a.
<u>Oilseeds</u>					
Rape & mustard	1,324	1,116	1,162	1,282	1,079(a)
Sesamum	81	56	70	75	78
Cottonseed	4,559	5,019	4,576	4,608	4,555
Groundnuts	94	100	108	111	125
<u>Cash crops</u>					
Cotton (lint)	4,559	5,019	4,576	4,608	4,555
Sugarcane	1,595	1,663	1,729	1,947	2,032
Tobacco	115	134	111	125	139(a)
<u>Condiments & Spices</u>					
Onions	58	73	76	75	79
Garlic	5	5	4	5	n.a.
Chillies	79	84	127	124	n.a.
<u>Vegetables</u>					
Potatoes	58	68	71	64	74(a)
Other vegetables	334	331	299	267	n.a.

(a) Provisional

n.a. Not available

Source: Ministry of Food, Agriculture and Cooperatives, as cited in World Bank, Pakistan Economic Developments, 1979.

7.4 Current Agricultural Status (1979)

Wheat production expected to recover to 9.5 million tons from low level of 8.3 million tons (1978 crop was attacked by rust, declining 10% from 1977 level). Increased plantings, larger use of fertilizer and favorable weather conditions all are contributing to

increased production. Owing to increases, total wheat import requirements for 1979/80 are estimated at 1 million tons against 2.2 million tons for 1978/79. However, problems continue with new high-yield varieties that have replaced traditional varieties in 75% of total cropped area; susceptibility of new varieties to rust and climate variations, and poor yield/acre have kept production from increasing at a faster rate.

Rice continues to perform well; however, both cotton and sugar production have declined. Storage space is a major problem, particularly for rice, as increased production has outstripped available accommodations. Improvements are also needed in the water delivery system, general agricultural management, fertilizer use, and research and extension service for further agricultural growth.

7.5 Agricultural Imports

Due to poor 1977/78 wheat harvest, wheat imports increased to an estimated 2.5 million tons for FY 1979. Major imports include edible oils, tea, and fertilizer. GOP paid with its own foreign exchange for most of imports as foreign food aid donors could not meet required amounts.

PL-480 for 1980-81 will stress edible oil imports (with amounts of wheat determined by production fluctuations) to encourage long-term growth oriented policies in crop price policies, fertilizer use and seed supply. Aims also for a reduction of public sector subsidies and balance of payment support until domestic production is raised. \$80 million has been requested for FY 1980-81 to be divided between edible oil and wheat; edible oil imports to be used mainly to finance wheat production reforms.

7.6 Agricultural Exports

Rice production has seen a steady increase (4.5% per annum 1971/72-77/78) to an estimated total of 3,020,000 tons for FY 1979. However, rice exports fell from a high of 928,000 tons in 1976 to 823,000 tons in 1977 and have risen only modestly in 1978 to 850,000 tons. This decline was due to increased domestic rice consumption resulting from the poor wheat harvest. Cotton lint production has

fallen drastically from 3.2 million bales in 1977/78 to 2.7-2.8 for 1978/79. Subsequent demand has led to soaring prices; to preserve local availability, exports of raw cotton were banned and contracts with foreign buyers renegotiated.

8. Physical Geography

8.1 Climate

Hot arid or semiarid climate with extreme temperature ranges both seasonally and diurnally. Rainfall on the whole is low (80% of cultivated land depends on some form of irrigation). Three seasons: November-February (cold, dry); March-May (hot, dry); June-October (hot, humid, SW monsoon).

Northern mountains: extremely cold winters, mild summers.

Upper Indus plain, Punjab: hot summers with dry winds parching the land. Temperatures are often above 100°F with great daily variation between high and low.

Sind or lower Indus basin: modified by the sea. Less extreme temperatures but higher humidity, often oppressive in summer.

Temperature (centigrade)

<u>Province/station</u>	<u>Height</u> (meters)	<u>1976</u>		<u>1977</u>	
		<u>max.</u>	<u>min.</u>	<u>max.</u>	<u>min.</u>
Baluchistan					
Khuzdar	1225	27.4	12.9	31.7	16.5
Quetta (Samungli)	1589	23.9	6.6	25.9	8.6
Zhob	1407	25.7	12.6	28.0	14.1
N.W.F.P.					
Peshawar	359	29.6	15.6	31.2	17.5
Chakdara	670	24.1	17.4
D. I. Khan	174	31.3	17.1	32.7	18.8
Punjab					
Bahawalpur	117	31.1	16.3	34.3	19.4
Jhelum	233	30.0	16.3	31.3	17.8
Lahore	214	30.3	18.7	31.7	19.2
Faisalabad	184	31.0	15.4	32.3	16.9
Multan	123	32.0	17.3	33.9	19.3

Province/station	Height (meters)	1976		1977	
		max.	min.	max.	min.
Rawalpindi	511	27.6	13.0	29.4	15.5
Sargodha	188	32.6	18.1	32.6	18.2
Sind					
Hyderabad	30	33.7	21.3	35.7	22.4
Jacobabad	56	33.5	20.3	35.1	21.8
Karachi (Airport)	22	30.9	18.6	32.7	21.5
Nawabshah	38	34.4	18.3	36.6	19.9

Source: Statistics Pocket-Book of Pakistan 1978.

Province/station	Height (meters)	Precipitation (millimeters)	
		1976	1977
Baluchistan			
Khuzdar	1225	264	250.1
Quetta (Samungli)	1589	322	231.0
Zhob	1407	304	315.0
N.W.F.P.			
Peshawar	359	625	449.4
Chakdara	670	...	307.0
D.I. Khan	174	328	223.3
Punjab			
Bahawalpur	117	720	183.1
Jhelum	233	1043	886.0
Lahore	214	1149	454.0
Faisalabad	184	450	426.8
Multan	123	427	112.8
Rawalpindi	511	1667	1312.2
Sargodha	188	353	304.1
Sind			
Hyderabad	30	355	268.3
Jacobabad	56	188	71.0
Karachi (Airport)	22	406	498.0
Nawabshah	38	195	92.7

Source: Statistics Pocket-Book of Pakistan 1978.



8.2 Topography

Area: 307,374 sq. miles (about size of California). Extends from Arabian Sea a thousand miles northward across Thar Desert and Eastern Plains to Hindu Kush and Himalayan foothills. Bounded by Iran and Afghanistan to the west, the disputed State of Jammu and Kashmir to the northeast and India to the east.

Four major geographical areas are distinguishable: the great highlands that border the country on the north and west; the plateau of Baluchistan in the southwest; the desert and barren marshland of the southeast; and the valley of the Indus River, together with its tributaries, that extends northeast-southwest the length of the country.

Indus Plain: the upper Indus plain in the Punjab varies from about 500 to 1,000 feet in elevation and consists of fertile alluvium deposited by the rivers. The lower Indus plain, corresponding generally to the province of Sind, is lower in altitude, declining to sea level at the coast. The lower plain differs from the upper in that it was formed by the deposits of one river rather than a network and the alluvium is more recent. The lower plain east of the city of Hyderabad is one of the most productive agricultural regions of the country.

Desert: Despite extensive development of irrigation in the Indus plain, some desert areas remain unusable. South of the salt range between the Indus and Jhelum rivers, is the Thal desert, extending about 100 miles in length. Of far greater size is the Thar desert, south of the Sutlej along the Pakistan-India border to the Rann of Kutch.

Plateau/Plains: the Baluchistan plateau, generally at 3,000 to 4,000 feet, is defined by the western ranges along the Afghan border and by those emanating SW and SE from Quetta. The plateau itself is an arid tableland of approximately 135,000 square miles with interior drainage. A large salt marshland called the Hamun-Lora is at the eastern end of the Chagai Hills on the Afghan border. An even larger salt lake and swampy area, the Hamun-i-Mashkel, is south of the Chagai hills on the border with Iran. Along the Arabian Sea below the line of the southern Makran range is a coastal plain, and a lowland salient of less than 500 feet elevation projects northward between the central Brahui and Sulaiman mountains.

8.3 Altitudes and Coordinates

Chaman	4,034 ft	30 58N	66 21E
Karachi	13	24 48N	66 59E
Jacobabad	183	28 22N	68 30E
Jhelum	763	31 40N	71 51E
Lahore	702	31 31N	74 24E
Loralai	4,699	30 31N	68 35E
Multan	413	29 30N	66 02E
Nushki	3,341	30 11N	71 25E
Peshawar	1,177	34 11N	71 21E
Quetta	5,490	30 19N	67 01E
Rawalpindi	1,675	33 35N	73 03E

8.4 Land Use

1975/76: 40% arable; 24% cultivated; 23% unsuitable for cultivation; 34% unreported, probably mostly wasteland; 3% forested.

8.5 Rivers

The Indus River, rising in the Tibetan Himalayas, flows NW for about 500 miles. After crossing the Indian-held portion of Jammu and Kashmir, it enters Pakistan's Baltistan Agency, is joined by a tributary SE of Gilgit, and flows SW 1,000 miles to the Arabian Sea. The vast drainage area of the Indus, one of the principal rivers of Asia, corresponds roughly in Pakistan to the provinces of the Punjab and Sind.

At Attock on the border between the Punjab and the NWFP, the Indus receives the waters of the Kabul River from the west. Continuing S and forming part of the boundary between the Punjab and the NWFP, the Indus passes west of the Potwar Plateau, which lies between Islamabad and the Salt range. This roughly EW range has some peaks of nearly 5,000 feet, but most do not exceed 2,500 feet. After the confluence of the Gumai and the Indus rivers a few miles south of Dera Ismail Khan, the Indus continues south for 200 miles to Mithankot, where it is joined by its major tributary, the Panjnad.

Panjanad River, 75 long, is the combined input of the "five rivers of the Punjab", the word Punjab being derived from panch (five) and ab (water). The 5 rivers north to south: Jhelum, Chenab, Ravi, Beas, and Sutlej. The Beas is in fact a tributary of the Sutlej, entering the latter a few miles east of the point where the Sutlej enters Pakistan. The boundary between Pakistan and India cuts across the 4 rivers. Because irrigation is of key importance on both sides of the boundary, disputes over the distribution of these waters formed one of the main sources of friction between the two countries. Assisted by mediation of IBRD, Pakistan and India resolved this dispute by the Indus Waters Treaty of 1960, allocating water rights of the Indus, the Jhelum, and the Chenab to Pakistan and assigning rights to the Ravi, Sutlej, and Beas to India.

Principal river of Baluchistan is the Zhob, running along the southern slopes of the Toba Kakar range and north into the Gomal (Gomal) River, a tributary of the Indus in the southern part of the NWFP. In southern Baluchistan several minor rivers flow into the Arabian Sea; from west to east these include the Dasht, the Mashkai, the Nal, and the Porali.

8.6 Irrigation

Some land reclamation through canalization in Thal desert. Giant irrigation and hydroelectric projects at Mangla Dam on the Jhelum River, about 50 miles southeast of Islamabad, and the Tarbela Dam, on the Indus about 40 miles northwest of Islamabad, will provide over 700 miles of interrivers link canals. Other irrigation canals include: the Thal project, with the Jinnah barrage on the Indus in northern Punjab; the Taunsa barrage at Dera Ghazi Khan; the barrage 90 miles north of Sukkar; the Sukkar barrage, 1 mile long with 7 output canals; and the Ghulam Mohammad barrage near Hyderabad. In addition to these control projects on the Indus, many other dams and barrages on the Punjab network of rivers and on other tributaries, such as the Rawal Dam on the Kurang river near Rawalpindi and Warsak multipurpose dam on the Kabul River northwest of Peshawar.

8.7 Mountains

The Western Himalayas - the Hindu Kush, Pamir, and Karakoram ranges - stretch in a great arc just north of the borders of Pakistan from Afghanistan to Jammu and Kashmir. None of the highest peaks of these ranges are within Pakistan; the highest point in the country, Tirich Mir of the Hindu Kush, with an elevation of 25,230 ft, straddles the extreme northwest border, north of Chitral. The elevations decrease south along the Afghan border but passage through them is still difficult. The Safed Koh range, called Spin Garh in the local Pushtu language, is crossed at a maximum elevation of 3,500 ft by the Khyber Pass, the most used access between Kabul in Afghanistan and Peshawar.

Southward along the western side of the Indus Valley are the Sulaiman and Kirthar ranges. Generally the Sulaimans are no higher than 7,000 ft, although Takht-i-Sulaiman at the northern end reaches 11,000 ft. The Kirthar decreases in elevation from 8,000 ft in the north to 4,000 ft in the south. Following the Afghan border westward to Iran, at the latitude of Takht-i-Sulaiman, are other ranges extending west-east: the Chagai Hills and the Toba Kakar. The former and easternmost are volcanic and of little height, but the Toba Kakar reaches 9,000 ft.

8.8 Seismicity

Pakistan is within a region of low seismicity. Most of the larger shallow-focus quakes occur between the Sulaiman range and the Afghanistan border. However, highly destructive quakes do occur in north Pakistan along both margins of the Indus valley, particularly in the Rann of Kutch.

As a geological focal point, the Quetta region has a complicated and unstable structure. Severe earthquakes ruined Quetta (5,500 ft) in 1931 and 1935.

In December 1974 an earthquake struck Swat and an area some 70 miles long on one side of the Indus valley, including a stretch of the Karakoram highway. In July 1975 an earthquake devastated many villages in the Rawalpindi district.

9. Transportation and Logistics

9.1 Road Network

70,424 km total roads (1977); 19,296 km paved, 13,019 km gravel, 1,854 km improved earth, 36,255 km unimproved earth. Coverage of existing network considered adequate, though quality is poor. Rural roads lack alignment and drainage; only partially usable in wet weather, subject to flooding by major rivers. Only 16% of the 43,000 villages are directly linked to serviceable all-weather roads. Primary roads link major cities only.

9.2 Mountain Passes

The Khojak pass, on Pakistan's side of the Afghanistan border 50 miles NW of Quetta, is an important access route through the mountains of western Pakistan. Further north about 30 miles west of Peshawar is the famous route through the Khyber pass. In the far north, access into the Wakhan corridor is provided by the Baroghil pass.

Along the PRC-Pakistan border are a succession of passes through the Karahoram range of the western Himalayas. From west to east, these are Kilik, Mintaka, Kharchanai, Parkit, Khunjerab, Mustagh, Gasherbrum, Indiakol and the Karakoram.

9.3 Vehicles

Number of motor vehicles registered

	<u>1974</u>	<u>1975</u>	<u>1976</u>
Passenger cars	173,042	186,392	202,752
Taxis	16,127	17,081	18,098
Buses	33,477	36,150	38,669
Trucks	53,467	57,219	60,537
Motorcycles (2 wheels)	174,597	206,164	245,418

Track Kilometers - Pakistan Railways

<u>Year</u>	<u>Total</u>	<u>Broad gauge kilometers</u>	<u>Metre gauge kilometers</u>	<u>Narrow gauge kilometers</u>
1974-75	12,497.36	11,216.15	552.60	728.61
1975-76	12,498.39	11,217.18	552.60	728.61

Movement of Passengers, Freight and Gross Earnings

<u>Year</u>	<u>Number of passengers carried (thousands)</u>	<u>Passenger kilometers (millions)</u>	<u>Freight carried (thousand metric tons)</u>	<u>Net freight (metric ton kilometers)</u>	<u>Gross earnings (thousand rupees)</u>
1973-74	140,654	11,602	11,185	7,344	974,702
1974-75	142,403	12,276	13,435	8,403	1,305,724
1975-76	146,210	12,817	15,239	8,977	1,541,980

Source: Pakistan Railways, as cited in Europa Year Book 1978.

9.6 PortsKarachi

Karachi is only port for oceangoing vessels; has good drydock and shipbuilding facilities; extensive dry cargo and petroleum discharging and storage facilities. Port of entry for seaborne trade for Afghanistan as well as for all Pakistan.

Latitude: 24° 48' 37" N.; long. 66° 58' 38" E.

Approach: The sanctioned depth at L.W.O.S.T. of the entrance channel is 8.84 m., lower harbor 8.23 m. and the upper harbor 9.14 m. Controlling depth at low water is 8.23 m. Vessels may enter at any stage of tide but may sail on the flood only, the latter being restricted to the period between low water and one hour before high water. The depths available pre and post monsoon at various berths are promulgated by the dock master to the agents bi-annually.

Largest Vessels: General cargo vessels drawing 8.23 m. can enter or leave port but deputy conservator may allow vessels of deeper draft depending upon tide and depth available at berths. Oil tankers and bulk carriers carrying wheat, drawing up to 9.75 m. are permitted to enter or leave the port subject to availability of tide and depth at the allocated berth. Bulk carriers carrying wheat are normally berthed at No. 15 and 17 and are required to discharge through evacuators only. Vessels exceeding 160 m. in length overall with bridge aft are handled during the day light hours only. Dry cargo vessels are accommodated and berthed abreast of other vessels during day light hours only. Such vessels, however, are permitted to sail at night.

Accommodation East Wharf: Berths numbered 1 through 17-A; lengths ranging from 36.6 m. to 164.9 m.; depths 3.0 m. to 10.4 m. 2 ship repair berths 79.2 m. in length, 7.3 m. depth. **West Wharf:** Berths no. 18-24A; lengths 37.8 m. - 213.3 m.; depths 5.5 m. - 11.6 m. **Juna Bunder** 376.7 m. long, 24 m. depth, being reconstructed to accommodate four 9.1 m. draft ships and two transit sheds. Allocation of berths made by the Karachi Port Trust on "first come first in" basis.

Transit Storage Areas:	<u>Open Area</u>		<u>Covered Area</u>	
Keamari	99,134 sq. m		63,265 sq. m	
M.I. Yard	36,576 sq. m		39,226 sq. m	
West Wharf	174,930 sq. m		68,160 sq. m	
Juna Bunder	10,639 sq. m		5,115 sq. m	

N.B.: The lighter berths and sheds of Juna Bunder are being reconstructed to accommodate four 9.1 m. draft shipping berths and two transit sheds. The whole scheme is expected to be completed in 1978.

Storage Areas:	<u>Open Area</u>		<u>Covered Area</u>	
T.P. Yard	174,800 sq. m		116,810 sq. m	
Keamari	68,115 sq. m		—	

Provisions: Available.

-
- Water:** Two water barges of 200 tons each are available and are augmented by two anchor hoys of 200 tons water loading capacity.
- Bunkers:** Night bunkering possible. Supply of fuel and diesel oil ex wharf at all berths, and marine diesel ex tanker wagons.
- Development:** The main navigable channel in the lower harbor has been widened from 182.9 to 335.2 m. and will be dredged to 10.36 m. and about 81 ha. of land is being reclaimed; seven mooring berths have been provided.
- Four medium draft berths are planned at Juna Bunder. west railway yards are being remodelled to serve expanded complex of 13 berths at west wharves.
- An oil tanker berth, initially dredged for 45,000 d.w.t. vessels, is planned. Karachi Port Trust proposes adding two tugs, six 6-ton mobile cranes, eight 3-ton electric portal cranes, one 30 ton electric portal crane and two self-propelled hazardous cargo barges.
- Shiprepairs:** Hull and engine repairs. Drydock available. Navy floating dock sometimes available for commercial use. Small repairshop for work not requiring drydocking.
- Charges:** The costs of port services are continually changing and it is advisable to obtain up-to-date information regarding charges from agents when required.
- Towage:** Five tugs with bollard pulls of 18 to 35 tons. Four harbor tugs of 320 h.p.
- Pilotage:** Compulsory for seagoing vessels of 200 tons net reg. and upwards. Pilot boards incoming vessel day or night about 3.2 km. off breakwater.
- Airport:** Karachi Civil Airport (international and domestic). Ten miles from city center.

Working Hours: 07.30 to 11.30, 12.30 to 16.30. Overtime: 16.30 to 18.30. Night shift: 19.00 to 23.00, 23.30 to 03.30. Overtime: 03.30 to 06.30. Working hours during Ramadan: on the wharves, all days, except Friday, 07.00 to 10.30, 11.00 to 14.00. Night: Shift 19.00 to 22.30, 23.00 to 02.00. Friday: 07.00 to 13.00 without break. For the clearance of import cargoes on all days except Fridays, 07.00 to 10.30, 11.00 to 15.00. Friday, 07.00 to 13.00 without break.

Muhammad Bin Qasim

This port is the second deep-sea port of Pakistan and is some 56 km. of present facilities at Karachi.

Latitude: 24° 46' N.; long. 67° 20' E.

Authority: Port Muhammad Bin Qasim Authority, P.O. Box 5771, Karachi. Tel. 552071-75. Telex: PK633. Cables: "Portqaty" Karachi.

Development: The Port Authority has plans for a 12 berth port, catering for ships up to 75,000 d.w.t. Maximum depth 15.1 m. These berths will handle: rice, cement, iron-ore and coal, phosphate rock, sulphur and fertilizer, also grain cargoes. There will also be an oil terminal.

9.7 Shipping

Pakistan Shipping Corporation (PSC)

Government owned and controlled. 24 ships (20 cargo, one mini bulk carrier, 3 passenger); capacity of 300,000 DWT and 4000 passengers.

National Shipping Corporation (NSC)

Government owns more than 50% of shares; however, it exists separately from PSC. 25 ships with DWT of 307,481.

Gulf Shipping Corporation Ltd.

Steel House, West Wharf Rd., Karachi; 4 dry-cargo vessels.

Muhammadi Steamship Co. Ltd.

Valika Chambers, Altaf Hussain Rd., (POB 4128), Karachi 2;
5 cargo vessels. Sri Lanka, Burma, India and USA.

Pan-Islamic Steamship Co. Ltd.

Writers' Chambers, Dunolly Rd., Karachi. 10 cargo/passenger
vessels; services: coastal, USA and Pakistan/Saudi Arabia
(pilgrim service); Karachi/Red Sea ports (cargo services).

Transoceanic Steamship Co. Ltd.

260 R.A. Lines, Karachi. 5 cargo vessels; services:
coastal trade.

United Oriental Steamship Co.

Baksh Chambers, Nicol Rd., Karachi; 7 cargo vessels.

9.8 Airports

Major airports at Islamabad, Karachi, Lahore, Nawabshah,
Peshawar. Other airfields at Quetta, Sukkur, Multan, Lyallpur,
Sargodha.

NB: For up-to-date information consult latest issue of weekly Inter-
national Notams, International Flight Information Manual, and/or
ICAO's Air Navigation Plan for appropriate region.

ISLAMABAD/Chaklala

Location Coordinates	Eleva- tion M/ Temp C	Runway Characteristics			Aircraft/ Strength (1,000 kg)	Fuel/ Octane
		NR/Type	Slope %	Aircraft/ Length M		
33°37'02"N	508	12/30	0.25	2743	A	LCN85
73°37'57"E	34					

Remarks: Alternate Aerodromes-Delhi/Delhi, Kabul/Kabul, Karachi/
Intl, Lahore/Lahore, Peshawar/Peshawar.

Aids: ILS 30-1, VOR, LSA 30, LR, LTX, LB, MD, MC, MT, MTD, MTX,
MO.

KARACHI/Intl.

<u>Location</u> <u>Coordinates</u>	<u>Eleva-</u> <u>tion M/</u> <u>Temp C</u>	<u>Runway Characteristics</u>			<u>Aircraft/</u> <u>Strength</u> <u>(1,000 kg)</u>	<u>Fuel/</u> <u>Octane</u>
		<u>NR/Type</u>	<u>Slope</u> <u>%</u>	<u>Aircraft/</u> <u>Length M</u>		
24°54'05"N 67°09'00"E	30 3.19	07/25R PA I	0.21	3200	A LCN83	100, JA1

Remarks: Alternate Aerodromes-Ahmadabad/Ahmadabad, Bombay/Bombay, Delhi/Delhi, Doha/Doha Intl, Dubai/Dubai, Islamabad/Chaklala, Lahore/Lahore, Nawabshah/Nawabshah.

Aids: ILS 25R-1, LPA 25R-1, LVA, LR, LTX, LB, LO, MD, MC, MT, MTD, MS, MFD, MTX, MO, H105, L6, L7. No Telex.

LAHORE/Lahore

<u>Location</u> <u>Coordinates</u>	<u>Eleva-</u> <u>tion M/</u> <u>Temp C</u>	<u>Runway Characteristics</u>			<u>Aircraft/</u> <u>Strength</u> <u>(1,000 kg)</u>	<u>Fuel/</u> <u>Octane</u>
		<u>NR/Type</u>	<u>Slope</u> <u>%</u>	<u>Aircraft/</u> <u>Length M</u>		
31°31'17"N 74°24'09"E	213 36.5	18/36 INSTR	0	2743	A LCN60	100, JA1

Remarks: Alternate Aerodromes- Amritsar/Amritsar, Delhi/Delhi, Islamabad/Chaklala, Karachi/Intl, Nawabshah/Nawabshah, Peshawar/Peshawar

Aids: ILS 36-1, RL, LPA 36-1, LSA 18, LVA 18 36, LR, LTX, LB, LO, MD, MC, MT, MTD, MS, MFD, MTX, MO, H90, L4, L5, L9. No Telex.

NAWABSHAH/Nawabshah

<u>Location</u> <u>Coordinates</u>	<u>Eleva-</u> <u>tion M/</u> <u>Temp C</u>	<u>Runway Characteristics</u>			<u>Aircraft/</u> <u>Strength</u> <u>(1,000 kg)</u>	<u>Fuel/</u> <u>Octane</u>
		<u>NR/Type</u>	<u>Slope</u> <u>%</u>	<u>Aircraft/</u> <u>Length M</u>		
26°15'N 68°22'E	37 37.4	02/20 INSTR	0	2743	A LCN60	

Remarks: Alternate Aerodromes-Karachi/Intl, Lahore/Lahore
Located approximately 50 miles North of Hyderabad

Aids: RVDR, LR, LB, LO, MD, MC, MT, MO

PESHAWAR/Peshawar

Runway Characteristics

<u>Location</u> <u>Coordinates</u>	<u>Eleva- tion M/ Temp C</u>	<u>Slope</u> <u>NR/Type</u> <u>%</u>	<u>Aircraft/ Length M</u>	<u>CL</u>	<u>Aircraft/ Strength</u> <u>(1,000 kg)</u>	<u>Fuel/ Octane</u>
34°00'11"N 71°30'21"E	360 35.4	17/35 INSTR	0 2743	A	LCN45	JA1

Remarks: Alternate Aerodromes-Kabul/Kabul, Lahore/Lahore.
Special use airport. Prior permission required. 48 hour
prior permission required for fuel.

Aids: RL, MD, MC, MT, MTX, MO, H90, L6, L7, L9. No Telex.

Key

Abbreviations

INSTR	Instrument Approach Runway
N-INSTR	Non-Instrument Runway
PA I	Precision Approach Runway Category I
PA II	Precision Approach Runway Category II
REG-NS	Intl Non-Scheduled Air Transport, Regular Use
REG-S	International Scheduled Air Transport, Regular Use

Radio Aids

ILS	Instrument Landing System
DME	Distance Measuring Equipment
VOR	VHF Omni-Directional Range
RL	Radio Locator

Lighting Aids

LPA	Precision Approach Lighting System
LSA	Simple Approach Lighting System
LVA	Visual Approach Slope Indicator System
LAV	Abbreviated Approach Slope Indicator System
LR	Runway Edge, Threshold & Runway End Lighting
LC	Runway Center Line Lighting
LTD	Runway Touchdown Zone Lighting
LTX	Taxiway Lighting
LB	Aerodrome or Identification Beacon
LO	Obstruction Lighting

Marking Aids

MD	Runway Designation Markings
MC	Runway Center Line Markings
MT	Runway Threshold Markings
MTD	Runway Touchdown Markings
MS	Runway Sidestripe Markings
MFD	Fixed Distance Markings
MTX	Taxiway Center Line & Holding Position Markings
MO	Obstruction Markings

Runway Surface and Length

H	Hard Surface (numbers = ft. in hundreds)
S	Non-Hard Surface (number = ft. in hundreds)

Additional Lighting

L1	Portable Runway Lights (electrical)
L2	Boundary Lights
L3	Runway Flood Lights
L4	Low Intensity Runway Lights
L5	Low Intensity Approach Lights
L6	High Intensity Runway Lights
L7	High Intensity Approach Lights
L8	Sequenced Flashing Lights
L9	Visual Approach Slope Indicator (VASI)

9.9 Personnel Entry Requirements

Passport: Required
Visa: Required
Vaccination: Smallpox. Yellow fever and cholera for arrivals from infected areas.
Other: For stay beyond 30 days, travelers must register with the local police.

See also section 1.11, Travel and Visa Information.

9.10 Aircraft Entry Requirements

All private and non-scheduled commercial aircraft must obtain prior permission to enter Pakistan airspace and must land at Karachi Airport, if entering from the west or south, or either Lahore or Karachi Airports if entering from the east or north.

Requests must be submitted at least 72 hours prior to entry in Pakistan airspace to the Director General of Civil Aviation, 19 Napier Barracks, Karachi-4, Pakistan (telegraphic address: CIVILAIR KARACHI/telex: none) and must include (a) name of operator, (b) type of aircraft and registration marks, (c) date and time of arrival and departure from Pakistan, (d) places of embarkation and disembarkation of passengers and cargo abroad, (e) purpose of flight, (f) number of passengers and type and amount of cargo, (g) name, address and business of charterer, if any, (h) complete route of flight, (i) fuel requirements.

Special notices: Any aircraft not engaged in scheduled air transport flying over or across Pakistan shall make a landing both on outward and inward journey at either Karachi or Lahore, and shall proceed onwards only upon issuance of a clearance certificate by an officer so authorized by the central government.

9.11 Airlines

Pakistan International Airlines Corp. (PIA), PIA Building, Karachi Airport, operates domestic services and international services to Afghanistan, Bangladesh, China, India, Iran, Kenya, Sri Lanka, United Arab Emirates, Europe, USA. Fleet (1978): 2 B-747; 4 DC-10; 12 B-707; 7 B-720; 8 F-27.

PIA Air Traffic - Passengers and Freight
(in thousands)

	<u>1974-75</u>	<u>1975-76</u>	<u>1976-77</u>
<u>Domestic Scheduled Operations</u>			
Kilometers flown	8,733	10,422	11,130
Passenger kms performed	555,897	691,205	848,178
Tonne kms performed			
Passengers	45,766	57,477	72,187
Cargo & excess baggage	10,462	11,386	14,123
Mail	613	661	832
Total	56,841	69,524	87,142
<u>International Scheduled Operations</u>			
Kilometers flown	19,450	23,068	24,369
Passenger kms performed	1,668,193	2,237,996	2,903,747
Tonne kms performed			
Passengers	148,676	199,765	263,731
Cargo & excess baggage	105,975	120,814	130,308
Mail	4,191	3,691	3,386
Total	258,842	324,270	397,425

Source: Statistics Pocket-Book of Pakistan 1978.

The following, airlines have service to Pakistan: Aeroflot, Air Ceylon, Air France, British Airways, Egypt Air, Iranian Airways, Iraqi Airways, KLM, Kenya, Airlines, Lufthansa, Pan American, Saudi Arabian Airlines, Swissair, Syrian Arab Airlines, Thai Airways International.

9.12 Air Distances

<u>Domestic</u> (statute miles)			<u>International</u> (statute miles)		
Karachi to:	Islamabad	702	Karachi to:	Kuwait	1215
	Lahore	637		London (Heathrow)	3935
	Multan	450		Manila	3552
	Nawabshah	119		Montreal	6985
	Peshawar	681		New York (JFK)	7255
	Quetta	369		Paris	3800
	Sargodha	596		Rome	3314
				San Francisco	8067
				Singapore	2938
				Tokyo	4299

10. Power and Communications

10.1 Energy Sources

Major domestic energy sources (1977) were hydroelectric potential of Indus River (3,430,000 kW capacity; 13.5 billion kWh produced; 175 kWh per capita) and natural gas deposits of 12-15 trillion cubic feet. Much of the latter used to fire electric power plants. Pipeline network supplies natural gas to most urban and industrial centers from Karachi to Peshawar. 54% of the urban population has access to electric power, but only 5% of the rural population does.

Energy supply patterns:

Oil	39.9%
Natural gas	36.2%
Hydro power	16.3%
Coal	6.0%
Nuclear power	1.3%
Liquid petroleum (LPG)	0.3%

During 1977/78 gas and oil were discovered at Adhi near Gujar Khan in Punjab; gasfield discovered at Pirkoh; first 4 units (175 MW capacity each) at Tarbela Power Dam near Islamabad started operation; gas production increased 5.2% and LPG by 70%.

Karachi Electric Supply Corporation (KESC), thermally powered, private stock corporation with government majority control, serves Karachi and Lasbela areas with 575 MW capacity of which 125 MW is generated at Karachi Nuclear Power Project (KANUPP). Total capacity of KANUPP is 137 MWe; new 600 MWe capacity nuclear plant being set up near Chashma (CHASNUPP) expected to be ready by 1983. In 1976 Pakistan Atomic Energy Commission announced plans for building 24 nuclear power stations, of which 8 would be ready in the 1980's and 16 in 1990's. Rest of country supplied by power branch of the Water and Power Development Authority with a capacity of 1,360 MW serving 1,000,000 customers. Supplies: 220 volts; 50 cycles AC.

Hydro plants: Warsak Hydroelectric Project, near Peshawar - 160 watts; extension underway of 2 additional units of 40 MW each.

Mangla Hydroelectric Project; near Islamabad - 400 megawatts; extension underway.

Tarbela Power Dam; near Islamabad - 1,400 megawatts; first 4 units in operation.

Thermal Plants: Major gas-fired plants at Lyallpur, Multan, Sukkur, Karachi, and Gudu. Coal fired plant at Quetta, and nuclear power plant at Karachi.

Electric Power in Million kWh

	<u>1974-75</u>	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78 (est.)</u>
Total generation	8,401	8,268	8,734	10,000
Hydro	4,359	5,427	5,184	7,274
Thermal	3,682	2,841	3,550	2,726

10.2 Telephone Systems

1,692 telephone exchanges, 290,000 telephones, 1,592 telephone facilities available (1977); 0.4 telephone per 100 population. One satellite station at Deh Mandro near Karachi.

10.3 Radio

Pakistan Broadcasting Corporation (PBC) 81-A Satellite Town, Rawalpindi. Dir.-Gen. Q.A. Sayeed.

8 broadcasting stations at Karachi, Lahore, Rawalpindi/ Islamabad, Multan, Bahawalpur, Peshawar, Quetta and Hyderabad with a daily output of 369 transmission hours. There are 30 short-wave and medium-wave transmitters with a total radiating power of 2,722 kW (14 medium-wave transmitters with total power of 1,611 kW and 16 short-wave with total power of 1,111 kW). Number of receiver licenses: 1.54 million in 1978.

All PBC stations broadcast in English and Urdu; Karachi and Hyderabad in Sindhi; Quetta in Pushtu, Baluchi and Brahui; Multan

and Lahore in Punjab; and Peshawar in Pushtu, Hindko, and Chitrali. Stations average 14 hours air time daily.

A new 300 kW medium-wave transmitter started operation in Peshawar (1977) with radial distance of 322 km (day) and 1,609 km (night).

Development plans include: construction of new broadcasting houses at Islamabad and Peshawar; new transmitters at Khuzdar (300 kW), Khairpur (100 kW), Skardu (10 kW), Muzaffarabad (100 kW) and Dera Ismail Khan (10 kW).

10.4 Television

Pakistan Television Corporation Ltd. (PTC), Itulsa Rd., Lalazar Colony; P.O. 230 Rawalpindi, Punjab. Government is the majority stockholder.

Five stations at Lahore, Karachi, Rawalpindi/Islamabad, Peshawar and Quetta telecast 7 hours daily from each station. 60% of programs originate in Pakistan, the rest imported. Color transmission started in 1976. 468,896 licensed sets in 1978.

<u>Station</u>	<u>Channel</u>	<u>Telecasting Hours (1976)</u>	<u>No. of TV Sets (1976)</u>
Karachi	4 and 9	186,889	1,445
Lahore	5 and 8	97,256	1,349
Rawalpindi/ Islamabad	4 and 8	55,997	871
Peshawar	10	11,454	422
Quetta	6	1,277	1,132

Source: Statistics Pocket-Book of Pakistan 1978.

Bibliography

Collier's Encyclopedia. Vol. 18. New York: Macmillan Educational Corp., 1978.

Europa Year Book 1978. A World Survey. Vol. 11. London: Europa Publication Ltd., 1978.

Food and Agriculture Organization of the United Nations. Foodcrops and Shortages. New York: FAO, April 1979.

_____. World Crop Harvest Calendar. New York: FAO, 1959.

International Agricultural Development Service. Agricultural Development Indicator: A Statistical Handbook. New York: IADS, 1978.

International Air Transport Association. Air Distances Manual. 3rd ed. London: IATA/International Aeradio Ltd., 1976.

International Civil Aviation Organization. Air Navigation Plan: Middle East and South East Asia Regions. Montreal: ICAO, January 1977.

International Monetary Fund. Direction of Trade. Washington, D.C.: IMF, May 1979.

_____. International Financial Statistics. Washington, D.C.: IMF, July 1979.

Nyrop, Richard F., et al. Area Handbook for Pakistan. Washington, D.C.: GPO, 1975.

Pakistan, Government of. Pakistan Statistical Yearbook 1977. Karachi: GOP Statistics Division, 1977.

_____. Statistics Pocket-Book of Pakistan 1978. Karachi: GOP Statistics Division, 1978.

Pakistan Year Book 1978. Karachi: East and West Publishing Co., 1978.

Ports of the World 1979. London: Benn Brothers, 1979.

-
- US Agency for International Development. Annual Budget Submission
FY 1978: Pakistan. Washington, D.C.: AID, June 1976.
- _____. Annual Budget Submission FY 1980: Pakistan. Washington,
D.C.: AID, May 1978.
- _____. Annual Budget Submission FY 1981: Pakistan. Washington,
D.C.: AID, May 1979.
- US Central Intelligence Agency. National Basic Intelligence Fact-
Book D.C.: GPO, January 1979.
- _____. Chiefs of State and Cabinet Members of Foreign Government
Washington, D.C.: GPO, June 1979.
- US Department of Health, Education and Welfare. Synchris: The
Dynamics of Health. Vol. XVII: Pakistan. Washington,
D.C.: GPO, 1976.
- US Department of State. Diplomatic List. Washington, D.C.: GPO,
January 1979.
- _____. Key Officers of Foreign Services Posts. Washington,
D.C.: GPO, March 1979.
- _____. Treaties in Force. Washington, D.C.: GPO, January 1978.
- _____. Visa Requirements of Foreign Governments. Washington,
D.C.: January 1978.
- US Department of Transportation. FAA. International Flight
Information Manual. Washington, D.C.: National Flight Data
Center, April 1978.
- World Bank. Pakistan Economic Developments and Fifth Plan Review.
Washington, D.C.: World Bank, April 1979.
- _____. Pakistan Staff Appraisal Report: Sind Agricultural
Extension and Adaptive Research Project. Washington, D.C.:
World Bank, May 1979.
- _____. World Development Indicators. Washington, D.C.: World
Bank, 1978.

World Health Organization. World Health Statistics Annual 1978.
Vol. III Health Personnel and Hospital Establishments
Geneva: WHO, 1979.

Worldmark Encyclopedia of the Nations. Vol. 4: Asia and Australia.
New York: Worldmark Press Ltd., 1976.