NATHAN BERGER Afghanistan Studies Project

Draft Final Report

# Macroeconomic Data Development: Phase II

## Volume 1: Summary of Problems of and Prospects for the Afghan Economy

Submitted to the
Office of the A.I.D. Representative
for Afghan Affairs

Under
Contract No. 306-0205-C-00-9385-00
Delivery Order No. 14

September 1991

Submitted by
Nathan Associates Inc. and
Louis Berger International, Inc.
A Joint Venture

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NATHAN
BERGER
Afghanistan
Studies
Project


23 September 1991

Dr. Curt Wolters
Program Officer
O/AID/Rep
Islamabad, Pakistan

Dear Dr. Wolters:

We are pleased to submit the enclosed five copies of the Draft Final Report for Delivery Order No. 14, Macroeconomic Data Development: Phase II. This study updates the database developed under Delivery Order No. 1, and uses the information to present a summary description of the Afghan economy. Chapter 3 updates, revises, and expands material contained in A.A. Ferogh, "The Current Political and Economic Situation in Afghanistan," Special Report, Afghanistan Studies Project (August, 1990). It is expected that this delivery order will be valued as much for its succinct presentation of the country's economic problems and prospects, as for the extensive body of macroeconomic data assembled.

Accompanying the report is a diskette containing all of the tables shown in Appendix A. Each table is a separate Lotus 1-2-3 file, which is named the same as the number of the table. For example, AIII2.WK1 is the file containing Table A III-2. O/AID/Rep's use of the data should be facilitated by having the tables on diskette, in an easily retrievable form.

We look forward to receiving your comments on this draft report.

Sincerely yours,

Phylo Evangelou
Team Leader

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# GLOSSARY

| | |
|---|---|
| ACBAR | Agency Coordinating Body for Afghan Relief |
| ADB | Asian Development Bank |
| ADS | Afghan Demographic Studies, CSO |
| Afghani | Unit of Afghan currency. Official rate: Afs. 50.60 = US$1.00, for every year since 1981-1982. "Bazaar rate": Afs. 692 = US$1.00, average for 1990-1991. |
| A.I.D. | U.S. Agency for International Development |
| AIG | Afghan Interim Government |
| AVICEN | Afghanistan Vaccination/Immunisation Centre |
| CPI | Consumer Price Index |
| CSO | Central Statistical Office of the GOA |
| ECA | Education Center for Afghanistan |
| FAO | UN Food and Agriculture Organization |
| GDP | Gross Domestic Product |
| GNP | Gross National Product |
| GOA | Government of Afghanistan |
| ILO | International Labor Organization |
| IMF | International Monetary Fund |
| MSH | Management Sciences for Health |
| NGO | Nongovernmental Organization |
| NMP | Net Material Product |
| NWFP | Northwest Frontier Province of Pakistan |
| O/AID/Rep | Office of the A.I.D. Representative for Afghanistan Affairs |
| SCA | Swedish Committee for Afghanistan |
| SNA | UN System of National Accounts |
| START | Short-Term Assistance for Reconstruction Team project |
| UN | United Nations |
| UNIDATA | Project of UNDP and UNOCA for generating and disseminating information on Afghanistan |
| UNIDO | UN Industrial Development Organization |
| UNDP | UN Development Program |
| UNDP/OPS | UNDP, Office of Project Services |
| UNFPA | UN Fund for Population Activities |
| UNHCR | UN High Commissioner for Refugees |
| UNICEF | UN Children's Fund |
| UNO | University of Nebraska at Omaha |
| UNOCA | Office of the Co-ordinator for the UN Humanitarian and Economic Assistance Programmes relating to Afghanistan |
| UNRISD | UN Research Institute for Social Development |
| USDA | U.S. Department of Agriculture |
| VFU | Veterinary Field Unit |
| VITA | Volunteers in Technical Assistance |
| WHO | World Health Organization |

# PREFACE

This report was prepared for Delivery Order No. 14 of A.I.D. Contract No. 306-0205-C-00-9385-00, the Afghanistan Studies Project, a joint venture between Nathan Associates Inc. and Louis Berger International, Inc. The research effort was carried out by a four-person team of consultants: Dr. Phylo Evangelou, Principal Investigator/Team Leader; Mr. Abdul Aziz Ferogh, Afghanistan Specialist; Mr. Messaye Girma, Research Analyst; and Ms. Jennifer Hall, Data Base Specialist. Mr. Robert R. Nathan was Principal for the study, and Mr. Harvey Lerner served as home office coordinator. Special recognition yis due Mr. Ferogh for contributing the summary description of the Afghan economy presented in Chapter 3. Dr. Curt Wolters was Program Officer and am Officer and Officer-in-Charge of Delivery Order 14. We wish to express our appreciation to the organizations and individuals who contributed information for the development of this database. A list of contacts and interviewees is included in Appendix C.

# Chapter 1

## INTRODUCTION AND EXECUTIVE SUMMARY

This report presents an updated and revised macroeconomic database for Afghanistan and provides a summary description of the current state of the Afghan economy using newly compiled data. Its preparation and presentation have been modeled on the data set prepared under Delivery Order No. 1 of the Afghanistan Studies Project. In Chapter 2, following a review of the construction and contents of the original database (hereinafter referred to as Phase I), development of the Phase II database is described. The tables that are included in the new database are Phase I tables updated or retained unchanged and additional tables not found in the Phase I data set. Likewise, some tables from Phase I are not included in the Phase II database. Reasons for additions, deletions, and modifications are discussed in terms of data reliability and relevance. A major operational distinction of the Phase II computerized database is replacement of Phase I's menu-driven system by Lotus 1-2-3 spreadsheet files. The rationale underlying this change is explained.

Chapter 3 provides a summary description of the current state of the Afghan economy, including current and projected problems, based on the new database. In-country and refugee population estimations are examined, and major sectoral indicators are reviewed for agriculture; transportation and communications; public health; education; and industry, mining, and energy. Monetary and financial statistics, as well as trade measures, are also discussed. The chapter concludes with a summary of what the current conditions mean for Afghanistan's economic future.

The appendixes, which are presented in a separate volume, contain the basic material for the day-to-day use of the database as well as other useful reference material. The statistical tables that make up the data set are found in Appendix A, organized by macroeconomic category. Appendix B consists of an annotated bibliography of books, articles, reports, and other documents relevant to Afghan data consulted by the Phase I and Phase II study teams. Appendix C is a list of relevant contacts, including telephone numbers and addresses, and sources for statistical data on Afghanistan.

The remainder of this introductory chapter presents the objectives and content of the Phase II database and a summary of the results of the project.

## Scope of the Database and Objectives of the Study

Selection of contents for the Phase I database was guided by the identification of probable data uses for development programs necessary for national recovery and reconstruction as described below. The purpose of the database was to provide a statistical basis for planning and implementing these goals. This overall objective remains the same for the Phase II database.

*Recovery*

Resettling the refugee population
Meeting basic human needs
Providing basic public services, especially education, health, and housing
Providing for an ample short-term money supply
Providing for immediate productive economic activity
Monitoring the progress of recovery and welfare projects

*Reconstruction*

Rebuilding infrastructure
Providing for employment
Promoting private investment
Developing the financial system
Developing the fiscal system
Providing for a permanent wholesale distribution system and more efficient retail system
Building public and private productive institutions

The Phase I study team recognized that in order to carry out these prospective activities, the database would need to be more inclusive than are most macroeconomic series published by international financial agencies. Data and indicators on such elements of development as population and natural resources would be required, in addition to standard macroeconomic statistics. Seven categories of tables resulted: national accounts and production data; public finance statistics; monetary and financial statistics; external sector series; demographic, labor force, and social indicators; infrastructural and natural resources data; and a set of summary tables.

In its organization and scope, the Phase II database derives directly from its predecessor. However, by relying largely on Phase I sources and thereby not needing to incur the costs of initial data searches again, it has been possible to focus attention on the macroeconomy depicted by the assembled data. The objective has been to prepare an up-to-date and readily accessible database and to use the information to provide a concise summary of Afghanistan's economic state and prospects.

## Summary of Results

### Database Updating and Modification

Chapter 2 of this report begins with a brief description of the development of the Phase I database. A comprehensive data-collection effort was undertaken to obtain information from institutional sources in the United

States and overseas. Primary and secondary data source institutions in Pakistan and the United States were consulted, and appropriate data from existing series were identified. The selected data were evaluated for their consistency and content, and some of them were accordingly adjusted. Resulting tables were organized and presented in a computer-accessible database, using the Lotus 1-2-3 statistical package. A methodological review of the data set was performed, and it was then applied in a preliminary analysis of Afghanistan's major economic problems.

The preceding background on the Phase I study provides the context for discussing tasks performed in developing the Phase II database. As specified in the scope of work (1) the contents of the original database and current sources of macroeconomic information on Afghanistan are reviewed, and (2) data suitable (in terms of current and anticipated needs of users) for inclusion in the updated database are identified, selected, and analyzed from a methodological perspective.

In general, data characteristics have changed very little since the Phase I study was conducted. Statistical information and economic data continue to provide a poor basis for making well-grounded and reliable assessments of Afghanistan's economic situation. Political fragmentation, together with the infrastructural breakdown that has resulted from more than a decade of warfare, have severely limited the government's ability to measure and evaluate indicators of macroeconomic performance. Nevertheless, even the International Monetary Fund (IMF), the single most reliable and useful information source, depends largely on statistics produced by government authorities.

Measures that depend on countrywide data collection continue to be those warranting least confidence, because many of the rural areas are not under the control of the government. Estimates of population levels and rates of change, agricultural production, and trade volumes and directions of flow are examples of key macroeconomic data that should be applied with the data-gathering limitations kept in mind. More centrally determined or verifiable elements of the macroeconomy, such as monetary aggregates and public finance expenditures, may be accepted with some greater degree of reliability.

A major change from the Phase I database resulted from a reassessment of agricultural data that had been taken from Swedish Committee for Afghanistan (SCA) reports. It is now widely believed that national production estimates extrapolated from SCA's regional studies were overly pessimistic about Afghanistan's agricultural decline. In-country population estimates proposed by the Phase I study team have also been reconsidered and adjusted upward, in the light of new research.

Chapter 2 concludes with an explanation of the change made in the data set's computerized format, from the menu-driven system of Phase I to regular Lotus 1-2-3 files for Phase II.

## Summary of the Afghan Economy: Problems and Prospects

Chapter 3 presents a summary description of the current state of the Afghan economy, using the revised and expanded Phase II database. Afghanistan's prolonged economic crisis, with approximately one-third of the nation's population in exile and its political structure still fragmented, shows few signs of abating in the near future. Observations supporting this dim outlook include the following:

- Total in-country population is estimated at roughly 13 million, with 1.7 million living in Kabul. Of approximately 4.6 million refugees, about three-fifths are in Pakistan and two-fifths are in Iran, not considering the relative small number (less than 5 percent of the population) residing in Europe, the United States, and elsewhere.

- Since 1978-1979, the real gross domestic product (GDP) has fallen at an average rate of 2.3 percent per year. Today, GDP is only three-fourths of what it was 12 years ago, despite the likely small change in total domestic population.

- Outstanding public debt in 1990 stood at $3.6 billion, with about three-fourths owed to the Soviet Union. In 1990-1991, debt payments exceeded aid inflows for the first time.

- The overall budgetary deficit has increased since 1978-1979 from 8.6 percent to 17.3 percent of GDP. In 1989-1990, external aid and borrowing from the central bank financed about 80 percent of total government expenditures, compared with 38 percent in 1978-1979.

- In 1989-1990, the current account deficit was 1½ times the value of exports. On average over the past 3 years, exports were able to pay for only 42 percent of commercial imports.

- Since 1978, the general price level has been estimated to have increased at an average annual rate of 23 percent. During the past 2 years, there has been triple digit inflation.

- Since 1978-1979, agriculture has suffered the most serious decline of any sector, with production falling 3.5 percent per year. Although there has been some recovery during the past year, annual production is still only two-thirds of what it was before the war.

- During this same period, government services was the one sector experiencing major growth, due to expanding military expenditures. It has increased at an average rate of 4.7 percent per year,

and today the public sector accounts for nearly 9 percent of GDP.

- The public health system is able to provide services for only about one-third of the people, whose general health status is characterized by poor sanitation; malnutrition among vulnerable groups; endemic infectious and parasitic diseases, including malaria and tuberculosis; and spreading drug addiction.
- Current primary school enrollment may well be only about one-third of the prewar level, despite substantial support from non-governmental organizations (NGO) in rural areas. Universities and institutes lack facilities and qualified teaching staff, which has led to a marked decline in educational standards.
- Transportation is perhaps the most critical constraint to the economic and political integration of the country and its rehabilitation. The lack of roads and other communications linking many of the settlements in the country also impede the delivery of adequate education and health services.

Conclusions about Afghanistan's economic prospects are no more positive than they were when the Phase I study was conducted. Unless political accommodation can take place—possibly induced by events outside of the country, such as changes taking place in the Soviet Union—the social stability essential to economic recovery will not be restored. Even with a political settlement, refugee repatriation and the country's reconstruction will be massive and complex processes. Afghanistan's future will not be without grave problems.

# Chapter 2

# UPDATING AND MODIFICATION OF DATABASE

## Phase I Macroeconomic Database

### Database Content and Sources

Selection of types of data to include in the Phase I database (Delivery Order No. 1) was guided by categories suggested in the scope of work for the assignment, namely, national accounts and production data, public finance statistics, monetary and financial statistics, external sector series, and population and labor force data. In addition, available social indicators and information on Afghanistan's infrastructure and natural resources were considered valuable for inclusion, given the country's major development challenges. Finally, a set of summary tables was considered appropriate to provide an overall picture of the country's macroeconomy.

Organization of the database into the above categories resulted in the following seven groups of tables:

I. Summary tables
II. National accounts and production data
III. Public finance statistics
IV. Monetary and financial statistics
V. External sector series
VI. Demographic, labor force, and social indicators
VII. Infrastructural and natural resources data

Principal sources of data for the 102 tables in the database were primary and secondary sources outside Afghanistan and the Soviet Union. Although the principle adopted by the Phase I study team was to use primary sources whenever possible, most current macroeconomic data on Afghanistan were found to be unavailable to U.S. Government contractors in primary form, just as most technicians who have worked with such data were unavailable for interview. In general, data generated by the Government

of Afghanistan (GOA) after 1983 were gleaned from secondary sources. Basic primary data sources not directly accessible, and therefore consulted through secondary sources, were Afghanistan's Central Statistical Office (CSO), which is responsible for the compilation and publication of all official statistics, and Da Afghanistan Bank, which serves as the central bank of the country and thus could provide monetary and financial series as well as trade data derived from foreign exchange applications.

Certain limited types of primary information are produced outside Afghanistan and the Soviet Union and were therefore more accessible. These primary sources included the Government of Pakistan, private Pakistani money changers, A.I.D. contractors, and NGOs. Notwithstanding these few primary data sources, the Phase I study team relied heavily on secondary data available in the United States and Europe. The most useful of the secondary sources were the following.

- The **International Monetary Fund (IMF)** and the **World Bank** have sent missions to Afghanistan for country reports and Article IV consultations.
- **Agencies of the United Nations,** including the Food and Agriculture Organization (FAO), United Nation High Commissioner for Refugees (UNHCR), the United Nations Development Programme (UNDP), and the United Nations Children's Fund (UNICEF), have collected previously generated data on demographic and economic trends in Afghanistan.
- A.I.D. has collected data and carried out research projects generating data on the Afghan economy.
- The U.S. **Department of Agriculture** maintains detailed and updated series on agricultural production and trade for Afghanistan, as it does for most other countries, based on secondary sources and publications.
- The U.S. **Library of Congress** contains a major collection of Afghan materials, maintained by an Afghanistan specialist, and accessible through the computerized search system.
- The **University of Nebraska** maintains a library and collection of materials on general Afghan issues.

The Phase I study team visited or contacted each of the above sources at least once and discussed data availability and coverage with the technicians concerned with the publications in each institution.

## Data Characteristics

Data assembled for the Phase I database were summarized by the study team according to certain characteristics, including units of measure, degree of aggregation, relative availability, compilation dates, and time periods for the principal series involved. Judgments regarding data reliability also were made. The team's findings are as follows.

The national accounts data, based on official Government of Afghanistan data, were adjusted by the World Bank, IMF, and UNDP. Unadjusted, official data were found to be neither very timely nor very reliable. Agricultural production data from external sources also were considered more dependable than the official series. The statistics were expressed in annual terms as national-level aggregates, with only limited agricultural data available by region.

For the public finance statistics, all available data on the income and expenditures of the Government of Afghanistan were from official sources. They were found to be slightly more reliable than national accounts data because they did not require compilation from inaccessible areas of the country or from uncooperative producers and consumers. Coverage was considered incomplete, however, because there was no full statement on the condition of the nonfinancial public sector. The series was expressed in annual terms and was national in scope, although some expenditure figures were found to be available by region.

With the exception of price indices, the monetary and financial statistics were considered the most reliable and the most timely of all the official series included in the database because they pertained to a very few, largely public sector, institutions located in Kabul. Aggregation was at the national level, with most series available within one year of the period covered. Price statistics were included in this category, but unlike the other financial series, were found to be unreliable and usually 2 to 3 years late. One series was limited to the capital city (the Kabul consumer price index) and the other to an unrepresentative market basket (the national price index).

The Phase I study team located several sources of external sector statistics, some of them quite reliable. In general, official data on international trade were relatively timely, usually available within 1 or 2 years. External financial data were obtained from official sources and were similar to the national financial data in reliability and timeliness. Exchange rate series, both official and private, were found to be quite reliable because they were verifiable from alternative sources.

With the exception of refugee-related data, the demographic data and labor force indicators were taken from official sources and were considered to be unreliable until adjusted. Corrected series of several varieties were

found to be available from international agencies and private researchers. Although official data were usually available within one year, demographic and labor force estimates were usually only projections.

The infrastructure and natural resources category was the least complete of those included in the database because of the general unavailability of relevant series. Official infrastructure have not been well maintained during the war, and certain resource data (especially proven reserves of mineral resources) were found to be restricted, possibly for reasons of security. Although this category was not included in the Phase I scope of work, the study team considered any reliable information that could be collected to be significant to future reconstruction efforts.

### Data Modification

The data collected were adjusted in two ways to mitigate serious deficiencies. First, obvious errors, omissions, and oversights were corrected, and modifications were performed to ensure that the statistical series conformed with each other. Second, disparate sources on production series—especially agricultural production—prompted the team to perform downward revisions of official data and of corresponding national income accounts. Inflated estimates also were suspected in the case of official demographic and labor force data. The Government of Afghanistan series in these areas did not take into account either internal or external (refugee) migration. In addition, they were based on partial census data that were apparently overestimates of true population levels. Wherever possible, the Phase I study team presented both the original and revised series in the final data bank.

### Recommendations for Database Improvement

Recommendations of the Phase I study team on how to improve the database included both long-term measures required of the Government of Afghanistan and short- to medium-term measures that could be accomplished either by the Government of Afghanistan or by international aid agencies and NGOs.

In order for Afghanistan's national accounts data to allow for comprehensive planning and to be comparable to the data of other countries, it was recommended that they be converted to a system comparable to the United Nations' System of National Accounts (SNA). It was proposed that in the short term survey-based data be developed that would include services and housing in measures of domestic product. In the longer term, it was suggested that a full census of each sector of the Afghan economy be carried out and follow-up surveys designed in order to develop a reliable system of national accounts.

Aside from problems of coverage and timeliness, the Phase I study team found that the greatest shortcoming of Afghanistan's public finance data was the lack of detailed financial statements for public enterprises. Without them, a full statement of the condition of the nonfinancial public sector is not possible and reliable analysis of the activities of the government cannot be carried out.

To improve monetary and financial series, it was suggested that "old" and "new" series on total money supply be harmonized. Also, it was recommended that price data be improved by organizing and supervising surveys outside Afghanistan to be carried out by international agencies or NGOs.

The main problem with external sector series was found to be their limited coverage. Without government control of the countryside and borders, the Phase I study team considered it unlikely that the Government of Afghanistan would be able to improve the coverage of its trade data. Comprehensive improvement of these data will likely have to await a peace settlement. It was recommended that exchange rate data for the Afghani be closely monitored, using the Zarab Sarafa Association in Peshawar as the basic source and direct contacts in Kabul if feasible.

It was noted by the team that no comprehensive improvement in demographic, labor force, and social indicators could be made without a full census which, once again, could not be carried out before a peace settlement. In the meantime, cross-border and refugee surveys of basic educational, health, and employment-related variables were proposed to provide measures of population parameters and vital statistics.

The same observation was made regarding infrastructural and natural resources data. Full censuses would be required, but surveys could be useful in the interim. It was proposed that surveys of the condition of infrastructure and the state of natural resources be carried out by monitoring teams on current O/AID/Rep and NGO projects.

The team's recommendations for improvement and expansion of the available data set on Afghanistan were condensed into three broad areas of activity: long-term, methodological development of official Government of Afghanistan series; conversions of existing series, based on more extensive knowledge of their methodology and content; and extended surveys of conditions inside Afghanistan over the intermediate term.

## Phase II Macroeconomic Database

### Overview

Discussion of the Phase II database is presented in terms of changes made in the content and computerized format of the first database. Data categorization into seven sets of tables remains the same as before, as shown

in Table 2-1, which gives the sources of tables in the Phase II database. About half of the Phase II tables are Phase I tables that have been retained unchanged. They contain relevant data from sources such as UNDP and the World Bank that have not produced more recent information. Even without the addition of new information, inclusion of these tables is considered appropriate given the relevance and general reliability of the data. The other half of the Phase II tables are either updated Phase I tables or are entirely new to the database. The review that follows focuses attention on these changes from Phase I. This chapter ends with a discussion of changes made in the database format.

**Table 2-1. Sources of Phase II Database Tables**

| Database Category | Phase I Data Tables: Updated/ Modified | Phase I Data Tables: Retained Unchanged | New Tables Added | Total |
|---|---|---|---|---|
| Summary Tables | 3 | 0 | 0 | 3 |
| National Accounts and Production Data | 4 | 18 | 10 | 32 |
| Public Finance Statistics | 3 | 6 | 0 | 9 |
| Monetary and Financial Statistics | 4 | 0 | 1 | 5 |
| External Sector Series | 6 | 15 | 6 | 27 |
| Demographic, Labor Force, and Social Indicators | 2 | 9 | 6 | 17 |
| Infrastructural and Natural Resources Data | 0 | 4 | 2 | 6 |
| Total | 22 | 52 | 25 | 99 |

Recommendations for database improvement made in the Phase I report are as appropriate now as they were when the study was conducted, and the political situation preventing their adoption is the same as well. Macroeconomic indicators that depend on countrywide sources, such as estimates of population, agricultural production, and the status of Afghanistan's infrastructural and natural resource base, will continue to be weak as long as the GOA's authority is restricted geographically. Likewise, trade statistics will be suspect until Government of Afghanistan is able to record, if not regulate, commodities crossing the country's borders, a capability unlikely to develop before a political settlement. On the positive side, data produced by Government of Afghanistan since 1988-1989 appear increasingly to be less biased estimations. This improved credibility underlies the use of some specific CSO figures, together with IMF data, as principal sources in the macroeconomic summary presented in Chapter 3.

## Contents by Data Set Category

### *Summary Tables*

The summary tables, as in the Phase I database, contain the data judged to be the best available macroeconomic information on Afghanistan. Table A I-1 (Volume 2) shows reliable and updated, long-period, macroeconomic statistics on national accounts, public finance, monetary measures, prices and exchange rates, balance of payments, and the country's population for 1978-1979 to 1990-1991. Where possible, total and annual average percentage changes, 1978-1979 to 1990-1991, have been calculated. Whereas the UN (particularly UNDP), ADB, and IMF were the sources used by the Phase I study team, only the IMF has since produced data that could be used in updating the series.

For both the Phase I and Phase II databases, adjustments by the Nathan-Berger study team have been included where considered appropriate. Explanations of the adjustments are included in discussions of tables found in the other sectors of the database from which the summary data are drawn. Phase I estimates of population levels have been revised, and previous adjustments of agricultural production statistics, based on data from the Swedish Committee for Afghanistan, have been reassessed.

Table A I-2 (Volume 2), presents information taken from the IMF's *International Financial Statistics*, which is the source of the most detailed and reliable series available on macro-financial data. Table A I-3 (Volume 2) presents standard IMF-selected macro data from its *Recent Economic Developments* publications. Through these two publications, the IMF remains the single most important source of information on the Afghan macroeconomy. The data series have been checked for consistency to the extent possible by the IMF Bureau of Statistics.

In addition, IMF *Consultations Reports* (the latest produced in 1991) contain series in tables entitled "Basic Data" as well as in other tables in the text of the reports. *Consultations Reports* include some data not covered in the *International Financial Statistics*, such as annual changes in net material product (NMP), public finance series, and prices. These are shown in Table A I-3 (Volume 2).

### *National Accounts and Production Data*

The IMF indicates that Afghan national accounts data continue to be compiled in terms of NMP, although the Government of Afghanistan's report to the Second United Nations Conference on the Least Developed Countries (1990) presented estimates of GDP for 1984-1986 and 1986-1987 in constant 1978-1979 prices. The NMP coverage is different from the UN System of National Accounts and also from that of most industrialized countries in that

the former includes only "activities of the material or physical sphere," excludes such substantial GDP components as public and private sector services and housing, and uses a mixture of cash and accrual bases of accounting.

In its *Yearbook of National Accounts Statistics* and in the UNDP *Draft Discussion Paper* of April 1988, the Un attempted to convert the NMP series into GDP series on the basis of answers received from the Government of Afghanistan to UN questionnaires; these adjustments were included in the Phase I database. Official NMP figures for 1981-1982 and 1989-1990 and GDP estimates for 1986-1987 and 1990-1991, which are only partly based on official figures produced by the Ministry of Planning and Central Statistical Office, are presented in Table A II-1 (Volume 2).

A new table, taken from "The Economist Intelligence Unit," presents the origins (1986) and components (1981) of Afghanistan's GDP (Table A II-9, Volume 2). In addition, new estimates and projections have been included in the following tables (Volume 2): Afghanistan's GDP (Table A II-2); area, yield, and production of major crops (Table A II-10); agricultural GDP (Table A II-11); agricultural levels and indices (Table A II-12); estimates of livestock production and GDP (Table A II-13, 14, and 15) and estimated and projected GDP from mining, industry, and electricity (Table A II-30).

The major change in data sources has been a greater reliance on some specific official statistics for agricultural estimates. However, the official data on agriculture, in general, should be viewed with caution because the government's responsible authorities have no access to rural areas for systematic data collection. Since 1989-1990, the local and regional information prepared by the Swedish Committee for Afghanistan has not been linked at the national level, weakening its macroeconomic applicability. Moreover, it is widely believed that previous SCA estimates were to some extent pessimistic, overemphasizing the deterioration of the agricultural sector during the 1980s.

Tables in this category that have been retained as they appear in the Phase I database contain, for the most part, data on agricultural production for northern and eastern provinces of Afghanistan. The information was taken from the World Bank or other sources that have not provided more current data. Other than for Government of Afghanistan statistics, the agricultural production data that have been updated are taken from the USDA series on agricultural trends and indicators and from the IMF.

### *Public Finance Statistics*

As reported in the Phase I study, Afghanistan's public finance statistics are considered fairly reliable by the IMF because the methodology of compilation and coverage has tested out as reasonably consistent. Coverage is incomplete, however, and these statistics are not prepared in a timely

manner. The only consistent and complete data series on the financial operations of the public sector relate to the central government and public financial institutions (see Tables A III-1 and A III-3 in Volume 2). Because it is not possible to prepare consolidated accounts of the nonfinancial public sector, one has to rely on information on central government operations. Once again, IMF-supplied data have been updated whereas it has not been possible to present more current UNDP or World Bank information.

*Monetary and Financial Statistics*

Even though deficiencies exist in concept and coverage of Afghan monetary statistics, these series are the most reliable and timely component of available macroeconomic data on Afghanistan. Again, according to IMF evaluation criteria, these data test out as fairly consistent in terms of compilation methodology and statistical trends. Sometimes, however, even these monetary statistics are available only after a considerable delay, often 6 months to 1 year. The most complete series available are presented in Volume 2 in Tables A IV-1, Changes in Monetary Aggregates, and Table A IV-2, Interest Rates on Bank Deposits and Loans.

Price statistics in Afghanistan suffer from much more serious deficiencies. Tables A IV-3 shows the Kabul consumer price index (CPI), which is based on the retail prices of 47 commodities until 1988-1989 and 50 items thereafter. The index does not take into account subsidized prices in government stores, which supply limited quantities of basic commodities to military and civilian government employees. Such sales probably have an indirect impact on prices of comparable goods in the free market. Its limited coverage and outdated weight structure make this index useful only as a rough indicator of price developments in the country as a whole.

A countrywide or national consumer price index also exists, but it is even less reliable because, in addition to exhibiting the same methodological shortcomings as the Kabul CPI, the prices included cannot be verified readily by the Central Statistical Office and Da Afghanistan Bank. Both official indices suffer from a complete absence of data on rents and costs of services. Even the somewhat more verifiable Kabul price index should be interpreted with caution for analytical purposes because it portrays only recorded price increases. Because of wartime conditions and the existence of significant price controls and subsidies, the actual underlying rate of inflation is likely to be substantially higher than indicated. A new table on retail price indices taken from UNIDATA (Table A IV-5, Volume 2) has been included for comparison.

Official balance of payments estimates, prepared by Da Afghanistan Bank, provide at best a broad indication of changes in Afghanistan's external payments position (see Table A V-6, Volume 2). In addition to not being updated, these data have limited coverage, excluding, for instance,

undocumented exports and imports, which are believed to constitute a considerable proportion of the country's merchandise trade. Deficiencies such as classification and valuation errors, the questionable reliability of export records, and the unsystematic recording of imports financed through the money "bazaar" have contributed to large and widely fluctuating "net errors and omissions" entries. Official trade and balance of trade statistics are presented in Tables A V-1 through A V-21, Volume 2.

The disruption in the traditional patterns of foreign trade as a result of the war has accentuated Afghanistan's statistical problems. The bulk of legal foreign trade, which previously passed through Pakistan, shifted to the Soviet Union. As noted by the Phase I study team, the effects of this shift and the volume of the new trade are unlikely to be adequately reflected in official statistics for three reasons: (1) as mentioned earlier, substantial current trade is unofficial (illegal); (2) many exports to the Soviet Union, including natural gas, are reportedly deliberately understated; and (3) many imports to Afghanistan from both the Soviet Union and Pakistan are not revealed for security reasons.

Exchange rate data are much more reliable. Official rates are a matter of record, even though they are not very relevant to the actual course of foreign trade in Afghanistan. The free market or "money bazaar" rates are those used for actual trade and are verifiable (Tables A V-22 and A V-23, Volume 2).

Tables in Volume 2 that have been added in this category include those in the direction of trade (Table A V-24); principal exports and destinations, imports and origins (Table A V-25); FAO trade indices (Table A V-26); and imports of cereals, flour, and sugar (Table A V-27).

*Demographic, Labor Force, and Social Indicators*

Official data on the population of Afghanistan were the least complete and the least reliable of all the series that were included in the Phase I database. Official Government of Afghanistan population projections were based on presumed average population growth rates as high as 2.4 percent, and mortality rates were presumed not to have changed, even in the face of war. These rates were then applied to an initial population estimate based on the census of 1978-1979, which was in fact an enumeration of only about one-half of the actual population (see UNIDATA, *Afghanistan Population Estimates by Province, District and Sub-district, A Graphic Presentation*). Adjustments made by the Phase I study team placed total population inside Afghanistan in 1986 at 9.8 million, dropping to 9.5 million in 1988.

More reasonable estimates have been made since the Phase I study was conducted. In particular, Dr. Thomas Eighmy, O/AID/Rep, has developed

widely accepted figures for 1990 of 16.90 million Afghans total, with 12.36 million inside Afghanistan and 4.54 million outside. The Nathan-Berger estimated total of 17.52 million for 1990-1991 is not significantly different from Dr. Eighmy's estimate (less than a 4 percent difference).

New tables (Volume 2) in this category include food supplies per person per day (Table A VI-10), projected food requirements (Table A VI-11), agricultural socioeconomic indicators (Table A VI-14), and levels of employment and structure of the labor force (Table A VI-15). Two new tables taken from UNIDATA show Afghanistan's estimated population by province (Table A VI-3) and numbers and provincial sources of Afghan refugees in Pakistan and Iran (Table A VI-8).

*Infrastructural and Natural Resources Data*

As in the Phase I database, fewer data have been included in this section of the database than any other, in part because of their scarcity and in part because the information has not been reliably maintained for more than a decade. Information on the transportation system, in particular, is unreliable. Natural resources data may be understated for security reasons. Two new tables indicate shifts in the use of land resources, 1978-1979 to 1989-1990 (Table A VII-2) and metal, mineral, and hydrocarbon resources (Table A VII-3).

Menu Format Deletion

The Phase I database was arranged in a menu format corresponding to the data categories discussed previously. However, while the categories have been retained, the Phase II database is not menu driven. Rather, each of the tables is an individual Lotus 1-2-3 computer file. This change in the computerized database is based on an assessment of the relative advantages and disadvantages of continuing with the menu-driven system.

Two operational objectives proposed for the Phase I database at the time of its development were that adjusted or "corrected" tables should include the correction factors and that the tables should be interlinked through common variables or functional relationships. The first objective was accomplished; linking of tables was not.

Linking the major statistical tables would have enabled corrections or modifications to be made to one variable or series to be automatically reflected in other tables. For example, updating a GDP series in one key table would be transmitted to the series in other tables. Also, the effects of experimental changes in specific data would be immediately calculated and reflected in related series in all tables.

In fact, the tables in the Phase I database were not functionally linked, although putting in place the macro commands to do so was deemed important at the time. It was subsequently recognized that Lotus 1-2-3 (Release 2.01) would be the software version most appropriate, given users' computer capabilities, and this version does not permit interlinking. Thus, a principal reason for originally designing a menu-driven format for the database was no longer valid.

For the end user of the computerized database, the absence of a menu of categorized tables by which to seek particular data will hardly be an inconvenience. The organization of the tables into the Phase I categories has been retained, and the search for specific data sets is essentially the same, whether using an on-screen menu or hard copy listing of the tables. The names of the individual Lotus 1-2-3 files are exactly the same as the numbers of the database tables, allowing users to locate them easily. Moreover, functional relationships between data <u>within</u> tables remain in effect.

Finally, widespread knowledge of Lotus 1-2-3 software will facilitate users' application of the computerized database without their having to become familiar with a menu program's commands and passwords. For all of these reasons, it was decided that deletion of the database's menu-driven operation would be a sensible improvement in the Phase II update.

# Chapter 3

# SUMMARY OF THE AFGHAN ECONOMY: PROBLEMS AND PROSPECTS

## Economic and Political Overview[1]

The economy of Afghanistan is predominantly agrarian with agricultural production accounting for about 46 percent of gross domestic product. The industrial sector is still at an early stage of development, and its share in gross domestic product is estimated at less than 13 percent. It is therefore evident that any strategy for the reconstruction of the economy should take into account the predominant role of the rural sector. The country is reportedly well endowed with mineral resources. However, the high costs of mining, the limited and costly transportation network, along with a lack of technical skills have failed to attract the financial resources for full exploitation of known deposits except for natural gas and some oil.

The country has an area of 65.2 million ha. of which 12 percent is arable. Forests cover 1.7 million ha. and pastures 40 million ha. Before the war only about 50 percent of the arable land was actually cultivated. Only two-thirds of the cultivated land was irrigated because of the limited availability of water. Today the total cultivated area is reportedly lower because of abandonment, and the amount of land irrigated is said to be less as a result of damages to irrigation systems. The magnitude of this situation will remain in contention until the database can be verified.

Agro-climatic conditions vary greatly. Precipitation is generally low and irregular, and the risk of severe drought is ever present. The growing season in most areas is comparatively short. This reduces the opportunity for double cropping, causing the bulk of the country's food production to come from grains such as wheat, barley, and corn—the main short-season crops. In spite of this, a wide range of long-season crops, primarily rice and cotton, are

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[1]Chapter 3 updates, revises, and expands material contained in A.A. Ferogh, *The Current Political and Economic Situation in Afghanistan.* Special Report, Afghanistan Studies Project (August 1990).

produced along with a variety of warm weather crops, including grapes, citrus and other fruits, and vegetables.

As a landlocked country, Afghanistan depends on the good will of neighboring countries for trade and transit to foreign markets. The lack of efficient transit facilities in Iran and Pakistan increases transportation costs of most imports and exports from areas far beyond the immediate borders. The country has no railways and few major roads.

The roads from Kabul through the Khyber Pass and through Kandahar/ Spin Boldak provide the main access to the transport system of Pakistan and the port of Karachi. Access to the sea, by way of Iran, is through the Gulf ports of Khorramshahar and Bandar-e-Khomeini, located more than 3,200 km from Herat. The northern highway through the Salang Pass to the bridge at Hairatan is the main link to the transportation network of the Soviet Union.

The rural population is scattered in small villages throughout the valleys where water is available and irrigation is possible. The difficult mountain terrain and the dispersed population increase the cost of integrating the country's economy. Outside the major urban centers the costs of providing and maintaining transportation services and facilities are unusually high and so are the costs of providing basic education and health services. The majority of rural people in these areas do not have access to safe drinking water and electricity. For all of these reasons infant mortality remains unusually high (more than 200 per 1,000 live births), and the literacy rate remains below 20 percent, especially for women.

The social and economic problems have been aggravated by the protracted war, which produced unprecedented human suffering and affected all aspects of the economy, as will be described in this chapter. The adverse economic effects of war were exacerbated by uncertainties resulting from unwise institutional changes as well as from the creation of economic and political conditions that fostered Afghan economic dependence.

The political situation of the Afghan society has remained fragmented. The forces of fragmentation continue to exist and have hindered economic development. The difficulties in transportation and communications have made it difficult for the country to achieve political unity. From 1963 to 1973, Afghanistan experimented with a constitutional monarchy that experienced frequent cabinet changes resulting in political and economic instability. In 1973, Daoud Khan gained power through a military coup. He suspended the constitution, deposed his cousin, the King, and proclaimed Afghanistan a republic. The traditional nonaligned foreign policy was retained, although the government moved closer to the Soviet Union with its commitment to a state-dominated economic policy. In the final days of the Daoud regime there was a definite cooling of relations between Kabul and Moscow.

In April 1978, Daoud Khan was killed during a coup, and the new regime formed a revolutionary council and adopted a Marxist program of "scientific socialism." The new regime introduced various repressive measures, including the confiscation of certain cultivated lands that gave rise to widespread resistance. A treaty of friendship, good neighborliness, and cooperation was concluded with the Soviet Union later that year, a treaty that paved the way for the Soviet's military intervention.

Afghan resistance to the Marxist regime continued in both urban and rural areas. In December 1979, the Soviet Union invaded Afghanistan and killed Hafizullah Amin, who had replaced Taraki in September of that year. The Soviet forces assisted Babrak Karmal in becoming the new head of state, but in May 1986 he was replaced by Najibullah. Najibullah tried in vain to pacify the resistance, but his policy of national reconciliation was resisted. In February 1988, the Afghan resistance formed the Afghan Interim Government (AIG) in Pakistan. During this entire period the Afghan resistance to the occupying forces of the Soviet Union increased markedly.

In April 1988, the United Nations announced that an agreement had been reached under which the Soviet Union would withdraw its troops from Afghanistan. The withdrawal began in May 1988. The troop withdrawal soon followed the Geneva agreement between the Kabul regime and the Government of Pakistan. These agreements were intended to bring peace and stability to Afghanistan and to pave the way for the return of refugees to their homeland. The Afghan Resistance rejected the Geneva agreement on the grounds that it did not provide for the right of self-determination for the Afghan nation and did not guarantee the transfer of power to a representative government. The war has continued. As a result, the Afghan refugees have continued to stay in Pakistan, Iran, and elsewhere.

The most recent political efforts toward finding a peaceful solution to the Afghanistan problem has centered around a five-point plan formulated by the United Nations Secretary General. This plan emphasizes, among other things, the need for a transitional period before the formation of a broad-based government to be determined through an Intra-Afghan dialogue. The Kabul regime and its only mentor, the Soviet Union, accepted the Secretary General's plan unconditionally.

The United States and Pakistan also reacted positively to the proposed plan. Reactions among the Afghan groups have been diverse; some of them expressed their consent, some of them rejected the plan, and others accepted the plan under certain conditions. As long as the Kabul government is in power and expects to take part in the Intra-Afghan dialogue, resolution of the Afghan conflict through a political process appears doubtful.

After the Geneva agreement, the Secretary General of the United Nations launched an appeal for humanitarian and economic assistance for Afghanistan and appointed a coordinator to assist in implementation. As of

September 1990, more than $1,031 million of aid was subscribed, about 67 percent of which was contributions in kind and most of it promised by the Soviet Union. Available information reveals that as of February 1991 a total of $148 million had been allocated to the United Nations agencies for the implementation of projects.

However, because of the unstable political conditions in the country, a United Nations-sponsored program is being implemented largely through the nongovernmental organizations operating out of Pakistan rather than through the AIG. It appears that the program is encountering substantial difficulties because of technical and logistical problems and institutional bottlenecks. The total resources required for funding the implementation of the United Nations sectoral program in 1991 was estimated at $94 million, or about 56 percent of the total budget believed to be required.

Afghanistan is still in the midst of a deep economic and political crisis:

- Approximately one-third of the country's prewar population still lives in exile,
- The political structure is highly fragmented,
- The productive capacity of the economy has been shattered by the effects of war, and
- There is no effective administrative structure to coordinate the reconstruction activities of the country.

In short the factors that led to strife in the past are still present, and the country is ill-equipped to deal with the problems of returning refugees.

In spite of sharp declines in the rural population over the past decade, Afghanistan remains predominantly rural. This population is dispersed among an estimated 31,000 villages throughout the country. Most of these villages lack access roads and are therefore isolated. Even before the war, the level of basic services available to the rural population was seriously inadequate by most world standards; today it is worse.

### In-Country Population Changes and Refugees

The total in-country population, adjusted for war-related deaths, is currently estimated at 12.97 million (Table 3-1). This assumes that about 4.6 million people are refugees living outside the country. Those that fled the country included a major proportion of the county's cadre of professional and

Table 3-1. Population and Rate of Growth, 1978/79 - 1990/91
(Figures in thousands)

| | 1978/79 | 1989/90 | 1990/91 | Average Growth Rate 1978/79-1990/91 |
|---|---|---|---|---|
| Total Population | 14600 | 18150 | 18520 | 2.0 |
| Less war-related deaths | -- | 1000 | 1000 | -- |
| Total population adjusted | 14600 | 17150 | 17520 | 1.5 |
| Less refugees in Pakistan | -- | 3000 | 2800 | -- |
| NWPF Province | -- | 2000 | 1930 | -- |
| Baluchistan | -- | 700 | 650 | -- |
| Punjab Province | -- | 200 | 170 | -- |
| Unregistered | -- | 100 | 50 | -- |
| Less refugees in Iran | -- | 1600 | 1550 | -- |
| | -- | | | -- |
| Less refugees in USA, Europe, India, | -- | 200 | 200 | -- |
| | | | | -- |
| Total refugees | -- | 4800 | 4550 | -- |
| Total population inside Afghanistan | 14600 | 12350 | 12970 | -1.0 |
| Settled population | 13050 | 11400 | 12070 | -0.7 |
| Rural | 10920 | 8300 | 9040 | -1.6 |
| Urban | 2130 | 3100 | 3030 | 3.0 |
| Kabul | 950 | 1700 | 1650 | 4.7 |
| Others | 1180 | 1400 | 1380 | 1.3 |
| Nomads | 1550 | 950 | 900 | -4.4 |

Source: The population figures for 1978/79 are projected from World Bank estimates of population for 1976/77, using an average growth rate of 2% per year. For the World Bank estimates see "Afghanistan: The Journey to Economic Development," Vol.II March 1978, World Bank.
The UN data on refugees in Pakistan and Iran were adjusted to reflect the current situation. The break-down of population in terms of urban and rural areas was based on socio-economic indicators and the results of the Kabul census of 1989-90.

technical personnel. In addition, more than 1 million people who remained in the country have migrated from the countryside to various urban centers, mostly to Kabul. The population of Kabul had reached about 1.8 million in 1987, roughly twice what it was a decade earlier.

### In-Country Population

In 1976-1977 Afghanistan's population was estimated by the World Bank at 14.0 million of which 12.5 million people were settled and 1.5 million were nomads. The average growth rate of population was then estimated at 2.18 percent annually. Today the growth rate is estimated to be only about 2 percent. Had the war not occurred, this rate would have increased the total Afghan population to between 18 and 19 million. However, this level was not achieved; partly because an estimated 1 million persons lost their lives as a result of the war, and mostly because large numbers fled to Pakistan, Iran, and other countries.

Today, Kabul and other urban centers are facing great shortages of housing, health services, social amenities, and food. These shortages have led to high prices that, coupled with limited employment opportunities, are bringing great hardship to many of the people. These hardships and a worsening of security conditions during the last 2 years have caused people to move away from the urban areas. The population of Kabul, for example, has declined from 1.8 million in 1989 to about 1.7 million today, and it continues to decline.

The Kabul government conducted a census in Kabul during 1989-1990. This survey revealed that there were 226,225 households in 11 districts (Nahya) of the city, comprising a population of about 1.5 million. However, it is believed that the survey results are underestimated by about 10 percent because of the prevailing security conditions. United Nations Fund for Population Activities (UNFPA) has recently planned to implement a sample survey of socioeconomic and demographic trends in Kabul through UNIDATA. The results of the survey will be collated with the demographic survey conducted by the government in 1986.

During the past 12 years the rural population has diminished from about 10.9 million to around 9 million—a decline of nearly one-sixth. Reflecting on this situation, the United Nations Research Institute for Social Development (UNRISD) estimated that nearly 70 percent of the male refugees in the Pakistan-based refugee camps had been farmers.

These numbers have important implications for the current availability of farm labor and the productive capacity of agriculture. A survey by the Swedish Committee for Afghanistan (SCA) conducted about 2 years ago concluded that the decline of the rural population had created labor shortages that were in part responsible for the decline of agriculture. Yet, if

it can be assumed that the decline in the farm population was about equal to the decline in the total rural population, that is, 17 percent, it would still be less than the rate of rural unemployment, which had been in excess of 20 to 30 percent before the war. This raises questions about the postulated labor shortages and their imputed impact on farm production.

**Refugee Population**

Currently, Afghan refugees are estimated at 4.6 million, with 2.8 million in Pakistan, 1.6 million in Iran, and the remaining 0.2 million scattered in other countries such as the United States, Europe, India, and elsewhere. According to United Nations High Commissioner for Refugees (UNHCR), 60 percent of the refugees in Iran are settled in the central and southern provinces, with a major proportion living in urban areas. The remaining 40 percent are residing in the border provinces.

It is generally believed that the majority of the Afghan refugees in Iran, particularly in urban areas, have been gainfully employed and are now well-integrated into the local economy. However, many Afghan workers have not brought their families with them to Iran and thus may not be regarded as fully integrated. From 1983 to 1988, years for which the data are available, the UNHCR provided a total of $75 million for programs involving Afghan refugees in Iran. UNHCR believes that because of the refugees' integration into the local economy, their repatriation from Iran that country might be slow and, in the initial phases, might involve mostly those who had settled in the border provinces.

The Afghan refugees in Pakistan live in about 350 camps and villages, with 1.9 million in the Northwest Frontier Province of Pakistan (NWFP), 0.65 million in Baluchistan, and 0.17 million in Punjab. In addition, large numbers of unregistered refugees have spread over the major urban areas. More than 70 percent of refugees have been dependent on foreign assistance from various sources. According to UNHCR documents, the total cost of relief assistance averages about $1 million a day.

From 1979 to 1988, the total expenditure incurred by UNHCR on relief operations in Pakistan amounted to $800 million, and Pakistan is believed to be contributing about Rs. 1 million a day. The World Food Programme has spent more than $85 million annually on its operations, which involve mainly food supplies. During 1988, for example, about 382,000 tons of wheat and 15,000 tons of edible (cooking) oil were supplied under this program. There are allegations that a cartel is reselling much of the donated wheat in the markets of NWFP and Baluchistan.

About 80 percent of the refugee population originated from the areas about 200 km inside Afghanistan, which suggests that when repatriation occurs it will be mainly to the nearby border provinces from which the refugees

originated. This will make assistance for repatriation and the provision of food supplies and essential inputs less costly than they would be otherwise.

So far, only a limited number of refugees have returned to their homeland. According to UNHCR and the United Nations monitoring missions visiting certain provinces in Afghanistan, some male members of land-owning refugee families are currently returning to selected areas to prepare fields for cultivation. However, it is uncertain if and when these isolated cases will develop into a full-scale repatriation movement of refugees. UNHCR has recently estimated that from 1988 to 1990 about 300,000 Afghan refugees returned to Afghanistan. During the same period, an estimated 100,000 Afghans sought refuge in Pakistan and Iran. Under a pilot project, the United Nations agencies involved provide financial support for repatriation in the amount of $150 for transport and 300 kg per family for food assistance in return for the surrender of the refugees' ration passbooks. However, this system has encouraged some heads of families, who cross the border to prepare for their families' gradual return, to hide their movements. Thus, the magnitude of phased repatriation is not easily discerned.

Two conditions are frequently stated by refugees as prerequisites for their return to their homes in Afghanistan: (1) removal of the Kabul regime from power and (2) establishment of a broad-based, representative government based on Islamic principles. In addition, any increase in the rate of voluntary repatriation from Pakistan and Iran will also depend on the assurances of personal, economic, and political security.

It has been observed that the segments of the refugee population to which the political coloration of the regime in Kabul is of vital importance are (1) former and current Afghan political leaders who have established themselves outside Afghanistan; and (2) government, business, and professional personnel who left Afghanistan as a result of the communist coup and subsequent Soviet invasion. Although articulate and critically important to the country's future, these two groups of refugees represent a small proportion of the Afghans refugee population. For the majority of the refugees, the critical considerations in their decisions to return appear to be (1) the conditions in the particular rural areas from which they came (often remote and isolated from Kabul) and (2) who is in control in these areas.

The UNRISD survey data mentioned earlier raises some important questions about the refugees' possible need for assistance. Before the war, adjusted Afghan Demographic Studies (ADS) data reflected a sex ratio of 48 females to 52 males. Among the refugee population that ratio has been reversed. The survey suggests a ratio on the order of 51.2 females to 48.8 males. This changing pattern suggests the possible need for establishing special social and economic programs to assist families headed by widows. It could well be that the in-country ratio has been reversed similarly, thereby increasing the potential magnitude of the problem of widows.

The UNRISD survey also revealed that approximately 60 percent of the Afghan refugee population in Pakistan was below the age of 18. This is about the same as it had been during the prewar period and implies a continuing high dependency rate and low levels of per capita income and personal savings. For the future it suggests that the working age population will increase at a fast rate in the next few years, and, unless jobs are created, the unemployment rate will rise dramatically.

## Economic Situation

Although the magnitudes may be debatable, there appears to be little doubt that the economic trends of the past decade are characterized by falling production, rising trade deficits, and increasing inflation. This is clear from official data and from recent studies undertaken by various international organizations operating in Afghanistan.

Real gross domestic product has fallen at the average rate of 2.3 percent per year—from Afs. 116.2 billion in 1978-1979 to Afs. 88.4 billion in 1990-1991 (Table 3-2). There were no signs of recovery during this period. In 1988-1989, the economy grew by 7.6 percent, as the government sector rose sharply, and a modest increase occurred in total production. In subsequent years, total gross domestic product dropped by an average rate of 4.2 percent, mainly reflecting the drastic decline of government services in real terms. However, total production in the main economic sector showed some signs of recovery, growing at 0.2 percent per year. Yet, GDP in 1990-1991 was only about 76 percent of what it had been in 1978-1979.

Before the war, the average growth rate of the economy had been estimated at 3 percent per year. Had this rate persisted, the gross domestic product would have reached Afs. 165 billion by 1990-1991. The current level is only 54 percent of that level, leaving little doubt that the economy suffered substantially from the ravages of war and from inappropriate policies.

This sharp decline in aggregate production, relative to potential, was caused by a marked deterioration in the productive capacity of the various economic sectors. The largest decline during the decade is estimated to have taken place in agriculture where total production fell from Afs. 61.8 billion to Afs. 40.6 billion, an average rate of 3.5 percent per year. This reduced agriculture's share of total GDP from 53 to 46 percent. This magnitude of loss from a sector that must lead economic development is devastating to economic progress. In the past year, some recovery has occurred. A growth rate of about 3.0 percent has raised agricultural production to nearly 46 percent of gross domestic product and to about 66 percent of its 1978-1979 level in real terms.

Table 3-2. Gross Domestic Product at 1978/79 Constant Prices, 1978/79-1990/91

(Values in Afs. millions)

| | 1978/79 Actual | Estimated | | | Share of GDP % | Avg. annual growth rate % |
|---|---|---|---|---|---|---|
| | | 1988/89 | 1989/90 | 1990/91 | 1990/91 | 1978/79-1990/91 |
| Agriculture, Livestock and Forestry | 61826 | 38350 | 39369 | 40572 | 45.9 | -3.5 |
| Mining, Industry and Energy | 14420 | 11803 | 11282 | 11464 | 13.0 | -1.9 |
| Construction | 4300 | 5000 | 3500 | 3650 | 4.1 | -1.4 |
| Transport and Communications | 3500 | 2800 | 2700 | 2750 | 3.1 | -2.0 |
| Trade & Distribution | 9700 | 9000 | 8500 | 8800 | 10.0 | -0.8 |
| Others | 1700 | 1500 | 1500 | 1515 | 1.7 | -1.0 |
| Total Production | 95446 | 68453 | 66851 | 68751 | 77.8 | -2.7 |
| Services | 9272 | 19221 | 13882 | 11277 | 12.8 | 1.6 |
| Housing (6% of total production) | 5727 | 4107 | 4011 | 4125 | 4.7 | -2.7 |
| Net Domestic Product | 110445 | 91781 | 84744 | 84152 | -- | -- |
| Depreciation | 5727 | 4589 | 4237 | 4208 | 4.7 | -- |
| GDP at factor cost | 116172 | 96370 | 88981 | 88361 | 100.0 | -2.3 |

Source: See Tables A II-2, 10, 11, 13, 14, 30.

Production from the industry, mining, and energy sectors, which contributed to more than 12 percent of GDP in 1978-1979, fell steadily from Afs. 14.4 billion to Afs. 11.4 billion in 1990-1991—a drop of about 2.0 percent per year. Even so, these sectors still make about the same proportional contribution to GDP—about 13 percent. This production came from a mix of government-owned and private industries. But while private enterprises showed declines ranging from 2.3 to 3 percent per year, public enterprises increased their output on an average of 1.5 percent per year.

The mining sector, which never contributed significantly to gross domestic product, declined even more. From a prewar level of slightly more than 1 percent, it now contributes less than 1/3 of 1 percent to the gross domestic product of the country. The decline was apparently due to sharp decreases in the production of natural gas, which had peaked at 2.8 billion $cm^3$ in 1984-1985 and fell to 0.4 billion $cm^3$ in 1990-1991. Following increases of about 1.7 percent per year from 1978-1979 to 1988-1989, the construction sector experienced a steady decline for 2 successive years when its net value added in real terms fell at an average rate of 14 percent, reflecting the rapid decline of the development expenditures in this period. In other areas, trade and distribution declined modestly, and the contribution of transportation and communications to GDP fell at an average annual rate of more than 2.0 percent.

Government services contributed the primary growth with a rate of more than 4.7 percent per year from the prewar level, causing the public sector to increase by more than 72 percent—from Afs. 4.5 billion in 1978-1979 to Afs. 7.8 billion in 1990-1991. This increase reflects the efforts of the government to maintain employment and to meet its increased needs for defense and security. Today the public sector is nearly 9 percent of the gross domestic product.

## Agricultural Sector

Between 1978-1979 and 1987-1988, the production of both food and cash crops fell sharply (Table 3-3). The estimated output of wheat, the main cereal crop, declined from 2.8 million tons to 1.86 million tons—a decline of more than 34 percent during the period. During the last 3 years, wheat output has recovered somewhat. With an average rate of increase of 1.7 percent per year, production is now about 70 percent of what it was in 1978-1979. It had been as low as 66 percent during the prewar period in 1987-1988, a year of exceptional drought.

The slow growth of food production during the last 2 years was exacerbated by locust and *sunn* pest damage to agricultural crops in northern provinces that could not be fully contained, given the lack of pesticides, extension services, and transportation. According to the Insect Damage Survey

Table 3-3. Estimated Production of Major Crops, 1978/79-1990/91 [a]

(Thousands of metric tons)

| | 1978/79 [b] | 1987/88 | 1988/89 | 1989/90 | 1990/91 |
|---|---|---|---|---|---|
| Food Grains | | | | | |
| Wheat | 2813 | 1863 | 1899 | 1920 | 1958 |
| Corn | 780 | 546 | 563 | 587 | 603 |
| Rice | 428 | 257 | 270 | 280 | 288 |
| Barley | 325 | 209 | 220 | 238 | 247 |
| Other Food Grains | 36 | 23 | 25 | 27 | 30 |
| Total | 4382 | 2898 | 2977 | 3052 | 3126 |
| Fruits and Vegetables | | | | | |
| Fruits | 824 | 589 | 582 | 597 | 614 |
| Vegetables | 766 | 514 | 517 | 536 | 575 |
| Industrial Crops | | | | | |
| Cotton | 132 | 40 | 40 | 35 | 28 |
| Sugar beet | 73 | 3 | 3 | 2 | 2 |
| Sugar cane | 64 | 34 | 32 | 26 | 28 |
| Oil seeds | 35 | 22 | 23 | 25 | 30 |

Source: see Table A II-10.

[a] Data on major agricultural crops as presented in the above table significantly differ from the official data presented in the GOA published documents, as they were adjusted on the basis of recent surveys conducted inside Afghanistan and observations and interviews with informed Afghans in Pakistan.
[b] The data for 1978-79 are adopted from the GOA Central Statistical Office publications.

conducted by the Swedish Committee for Afghanistan (with assistance from UNDP), Badghis, Faryab, and Balkh provinces were seriously affected. A crop protection program was designed by the UN system for 1991 to reach nearly all affected areas or an estimated 0.5 million ha. in 9 provinces.

Currently, basic foods are still in short supply; a major portion of the food requirements are met through imports. The price of wheat in Kabul, where it rose from Afs. 70 per seer in 1987-1988 to nearly Afs. 1,400 per seer in 1990-1991, reflects this situation. Annual imports of wheat from all sources are currently estimated at more than 480,000 tons. This is substantially above peak-level imports during the prewar period. During the last decade, the government has imported about 230,000 tons of foodgrains annually, mainly wheat from the Soviet Union. Since 1987, the United States has supplied about 280,000 tons of wheat under its humanitarian assistance program. This program, which was implemented through cross-border operations from Pakistan, included direct distribution, commercial sales, and food-for-work components. About 24,000 tons of food were distributed to vulnerable groups by the UN system under food-for-work activities.

Hampered by security conditions and lack of financial incentives and manpower, production of sugar beets and cotton has declined. Sugar beet production has been virtually eliminated, and cotton output is now about one-fifth of what it was before the war. The government has recently doubled the procurement price for cotton and tripled the price of sugar beets to encourage production of these commodities. However, because of falling relative prices and security conditions, the government pricing policy has not yet been effective.

Because of difficulties in marketing and the high incidence of disease and pests, production of vegetables and fruits had also declined by 25 and 26 percent, respectively, from prewar to 1990-1991 (Table 3-3). Under the A.I.D. humanitarian assistance program for Afghanistan, Volunteers in Technical Assistance (VITA) is providing assistance to farmers in Afghanistan to replace the horticultural stock destroyed by the war. Recently it contracted with farmers to grow about 2 million seedlings.

These losses in agricultural production are attributable largely to the war and to the decline of farm and rural populations. In 1987-1988, the area irrigated had declined by about 21 percent as a result of damages to irrigation systems. At the same time, the rainfed area that was planted had declined by some 30 percent. There is some evidence that some of the abandoned land is being returned to production.

Almost all of the modern irrigation projects that were under construction with foreign assistance at the start of the war remain unfinished. The traditional irrigation systems, on which 90 percent of Afghanistan's agriculture depends, have long been the subject of neglect and inadequate maintenance. These systems have sustained further damage as a result of the war. During

the past 4 years, several nongovernmental organizations (NGO), especially VITA, have undertaken the rehabilitation of karezes in several districts. Although this contributes commendably to the welfare of the farmers involved, it contributes very little to the solution of the national problem of food shortages.

Before the war, about 85 percent or 2.2 million ha. of land under irrigation received water from surface irrigation facilities, mainly canals; 8 percent or 0.21 million ha. were irrigated by wells or springs, and only 7 percent received water from about 6,700 karezes. The importance and role of karezes in the rehabilitation of Afghanistan's agricultural sector should be observed in this context. Since mid-1987, VITA has rehabilitated more than 2,260 karezes, and work on an additional 660 karezes is in progress. Under the UNDP cross-border program, about 1,000 karezes are expected to be rehabilitated by other NGOs by the end of this year. So far, a major part of this activity has been implemented in 5 provinces where an estimated 3,800 karezes existed. On the basis of these considerations, it might be concluded that in this activity some duplication has occurred and that a high priority should be assigned to the rehabilitation of surface irrigation in order to promote the recovery of the agricultural sector.

The steady deterioration of irrigation networks in the last 12 years is likely to exacerbate land tenure constraints. In some areas, small farmers have already expanded their plots at the expense of neighbors who are now refugees. During this period, the number of abandoned farms increased threefold, whereas the number of owners decreased by 30 percent. Repossession of abandoned land that has been cultivated by sharecroppers and caretakers over the last 12 years could create some tenurial problems.

In the past, efforts to improve irrigation systems were thwarted by severe shortages of capital, technical inputs, and maintenance and repairs. Inequalities in the distribution of benefits according to traditional water rights are further impediments to the improvement of traditional irrigation systems and to the efficient use of water. These problems still exist.

In spite of water shortages, considerable potential exists for increasing production on irrigated land, mainly through increases in the use of chemical fertilizers, improved seeds, use of pesticides, and improved farm and irrigation practices. Although some increase in the use of fertilizer has been recorded in recent years, no more than 13 percent of the irrigated area currently receives fertilizer. Total fertilizer use in 1990-1991 amounted to 100,000 tons, representing 38 kg/ha. of irrigated land and roughly the equivalent of 500,000 tons of wheat. But difficulties with transportation and storage and the high cost of transportation suggest that actual distribution by all sources could be even less. The UN system and other sources shipped about 10,000 tons of fertilizer to Afghanistan through cross-border programs.

The official price of fertilizer is currently set at Afs. 12,000 per ton. This reflects a highly subsidized rate compared with free market prices, which are reported to be about Afs. 60,000 per ton. It should be noted that almost all of the requirements for urea fertilizer are being met through the Mazar-i-Sharif fertilizer factory, which is still managed and operated by Soviet experts.

Domestic production of quality wheat seed, an important input for efficient fertilizer use, has generally been inadequate. The current supply amounts to less than 1,000 tons or about 5 percent of the need for seed wheat. Experts believe that the indigenous seed has lost its genetic potential and needs to be replaced. In recent years, the Kabul government imported about 10,000 tons of improved wheat seed annually, mainly from the Soviet Union. Several Pakistan-based organizations with cross-border operations have provided an additional 3,000 tons of improved seeds during each of the past 2 years, with assistance from the UN system and bilateral sources.

Although attempts have been made to start seed multiplication projects in the country, the lack of communications and unknown effectiveness of the extension services that are provided leave the efficiency of these projects in doubt. In addition, there are no uniform seed quality standards nor are there any coordinating mechanisms to ensure that seed multiplication activities proceed systematically.

For security and other reasons the extension service, which was established in the early 1970s, has collapsed. The basic organizational structure still exists, but it operates mainly in Kabul. Out of 273 extension units with 3,500 agents, only 90 units with 400 agents were actually functional. Some of the nongovernmental organizations such as VITA, SCA, and others have developed extension services for implementing agricultural programs, but their numbers are inadequate. In addition to the retraining of extension staff, close cooperation is required in the field between provision of water and agricultural extension.

Most farmers have limited access to credit. Merchants and money lenders who once provided most of the credit to farmers, although at high interest rates, have long left the rural areas. The land reform program introduced by the Kabul regime in early 1979 not only caused hardship for the people but also hampered the operations of the Agricultural Development Bank of Afghanistan.

According to data from the Agricultural Bank, the bank's lending has dropped from Afs. 1.8 billion in 1981-1982 to less than Afs. 560 million in 1990-1991. The working capital now available to the bank is inadequate, and more than Afs. 3.9 billion of overdue loans are outstanding. The management of the bank has suffered because a large number of its technical and managerial personnel have left the country. The nongovernmental organizations have not yet been able to organize an agricultural credit program to support small and

large farmers in Afghanistan. Because of the lack of credit, small farmers will benefit little from current farm programs. The larger, better-off farmers who have access to credit and the inputs that can be purchased are most likely to benefit from the program.

The total output of livestock has declined at an average rate of 4.9 percent per year, and the livestock contribution to total gross domestic product has decreased from 16 percent in 1978-1979 to 12 percent in 1990-1991. It is believed that the livestock population of the country may have declined by nearly 50 percent mostly as a result of the war. The existing livestock population continues to suffer even more than before the war, from disease and poor management because of the curtailment of veterinary services and vaccination programs. Poor nutrition, resulting from overgrazed pastures and feed shortages, has always been a major impediment to animal production. With the decline in the number of animals, pastures have regenerated somewhat. During the years of conflict, the Kabul administration has been unable to provide animal health services to the livestock sector. The facilities and manpower are totally inadequate for taking care of more than 12 million animals.

Some nongovernmental organizations are implementing limited veterinary programs for the Afghan refugees in the border areas and have trained more than 100 veterinarians to work inside Afghanistan. These programs, which are still at a rudimentary stage, should focus on training selected villagers as veterinary workers as well as providing limited direct services.

A major part of the UN assistance in this area is implemented by the UNDP/OPS NGOs Support project, which has established its bases in Peshawar and Quetta, Pakistan. NGOs, operating under this program, have so far established 46 Veterinary Field Units (VFU) in Afghanistan, through which, during the last 2 years, about 2 million animals were vaccinated against and treated for principal diseases. This project supports community-based veterinary services at comparatively low cost. A typical VFU consists of one veterinarian and two to four paravets, providing veterinary services to 50,000 animals on average.

According to SCA estimates, the shortage of farm power has constrained the rehabilitation of agriculture in some areas of the country. It is believed that at least 300,000 pairs of oxen or 30 percent of the country's total animal traction has been lost over the last decade. So far NGOs have replaced only a small portion of total farm power requirements; VITA has sent 500 bullocks, 15 tractors, and about 300 threshers to Afghanistan this past year, and other organizations have supplied 400 pairs of oxen and 60 tractors. Meeting the needs for farm power will be an important factor in rehabilitating Afghan agriculture. Tractors are likely to play a much more important role today than before the war.

Natural forests, capable of supporting commercial logging operations, are located in Paktia and Kunar provinces, comprising approximately 450,000 ha. each. Logging practices have remained wasteful, and wastage rates are estimated to be as high as 60 percent. Before the war, the rate of felling was estimated at about 1 $cm^3$ annually, which was substantially higher than the normal growth rate.

Forests were controlled on the basis of traditional laws by one or another tribal group with rights to exclude others. Because of the uncertainty of land tenure and the communal ownership of natural forests, no serious attempts were made in the past to improve forest management or curb deforestation.

Because of the absolute lack of control over logging operations in the last decade, the rate of deforestation accelerated markedly, with the result that reserves are being depleted at a fast rate. The problems have been aggravated by proximity to Pakistan, which has been the destination of smuggled timber.

Currently, a few NGOs, supported by the United Nations system, have implemented forest management and protection projects in Kunar province on a very small scale. If no serious actions are taken, the Kunar and Paktia forests could be completely destroyed in 4 to 5 years.

### Transportation and Communications

A modest network of roads is the predominant mode of transportation. In 1978-1979, about 21,000 km of road existed with 2,700 km of paved primary roads, 4,000 km of gravel roads, and 14,000 km of feeder roads. The development of a formal system of roads was started in the late 1950s. From 1957 to 1977, about $450 million was spent on major roads. But even after the primary road network was in place, the inadequacy and generally poor condition of feeder roads continued to impede national unification and the development of the rural economy.

During the decade of the war, the condition of roads deteriorated markedly. The war prevented regular road maintenance, and some 30 percent of the bridges and roads have been destroyed or severely damaged. The primary roads were originally paved with asphalt, but much of the pavement has been destroyed. For example, the overall condition of the Kabul-Kandahar highway is so bad that it now takes a truck more than 15 hr to travel a distance that previously took only 6 hr.

The operations of the agencies that are responsible for planning, construction, and maintenance of the road network have come to a standstill because of a lack of funds and technical capacity. Apparently the Kabul government is unable to implement a road maintenance or construction

project outside the Kabul limits. The United Nations Development Programme (UNDP) reports that a few NGOs have some capability to implement road projects, and a few have the capability to plan and develop design standards and to prepare cost estimates.

It is widely recognized that VITA also has the engineering capacity to build roads to carry low traffic volumes. During the last 4 years, VITA has built 10 bridges and 13 minor roads. Work is in progress on 3 bridges and 15 minor roads. Construction was carried out with labor-intensive techniques and at relatively low cost. The means of maintaining these structures has not yet been worked out. However, no detailed published information on the specifications and impact of these projects is available. Tracking the progress and scope of the program by citing the number of projects appears to be inappropriate.

The UN system has so far undertaken very limited repair work on secondary and access roads. Some road repair activities have been supported by WFP under food-for-work programs in areas where food prices are high, but the scope of the program has remained limited. The UNDP-supported Short-Term Assistance for Reconstruction Team (START) project has completed preliminary surveys of about 1,400 km of roads in 9 provinces; more detailed surveys were prepared for about 400 km of roads. Recently, a 70-member road repair unit was organized to rehabilitate 500 km of secondary and access roads in Paktia, Paktika, Logar, and Wardak provinces.

In 1978-1979, the country contained about 65,000 major vehicles consisting of 22,000 trucks, 12,300 buses, and about 31,000 cars. In addition, there were about 10,000 motorcycles and auto-rickshas. Many vehicles are reported to have been damaged during the war and many of them are badly in need of repair. Since 1978-1979, the total number of vehicles declined by about 2 percent, but the number of privately owned trucks is said to have decreased by nearly 18 percent, whereas the number of publicly owned and operated trucks increased fourfold. Today, the share of privately owned trucks is only 69 percent, whereas it had been as high as 90 percent before the war.

The capacity of the national trucking fleet was estimated to be 167,000 tons in 1989-1990. This was a decrease of 3 percent from the 1978-1979 level. During the same period, the capacity of the public sector fleet increased sixfold, from 13,000 tons to 71,000 tons, whereas the capacity of the private sector fleet declined from 159,000 tons to 96,000 tons, a drop of about 40 percent. It has been observed that the private trucking fleet now consists of a large number of small and aged trucks. This is believed to be the result of more favorable import duties on smaller and older trucks than on the newer and larger ones. During the past decade, many new trucks were imported by the government from the Soviet Union to facilitate its imports of emergency supplies and materials. Nine separate transport enterprises were formed with total assets of about Afs. 8 billion.

Because of poor road conditions and other factors, total freight traffic has apparently declined in recent years. Government statistics indicate a total of 1,943 million ton/km being carried in 1984-1985 and only 1,083 million ton/km in 1989-1990, an annual rate of decrease of 12 percent per year for the 5-year period. About 74 percent of the total haulage was carried by the private sector. These data do not, however, reflect the unofficial cross-border trade that is taking place between Afghanistan and Pakistan. According to recent findings, 100 to 140 trucks cross the border each day on major routes carrying food and a variety of other items of trade.

Freight rates have increased sharply because of the poor road conditions, smaller size of vehicles, and the risk of detection. Currently, freight rates are estimated to be about 10 times the level that would prevail under more normal conditions. According to VITA, in mid-1989-1990, the cost of transporting 1 metric ton of fertilizer from Peshawar to Kunar was about Afs. 18,000, and from Peshawar to Wardak or Logar it was estimated at more than Afs. 90,000, only slightly less than the price of fertilizer itself.

In addition to in-country problems, the cost of transportation for items in international trade is also high. The frequent transshipment of goods and the inadequate port and transport facilities of both Pakistan and Iran severely limit Afghanistan's access to the sea. Currently, 70 percent of Afghanistan's official trade is moved through the Soviet Union, and only 20 percent is moved through Pakistan. The construction of a road and railway bridge across the Amu Darya at Hairatan, with financial and technical assistance from the Soviet Union in 1982, helped to expand trade with the Soviets. Trade through Iran has come to a virtual halt in recent years.

The International Truck Company, which was established in 1977 for operation with Europe via Iran, was abolished in 1982. This company, which became operational in mid-1977, was a joint venture between the Government of Afghanistan and a subsidiary of Dutch Railways.

The capacity of telephone exchanges, both automatic and manual, is about 33,000 lines. For the in-country population of 12.8 million, this represents 1 telephone for every 387 persons. About 60 percent of the telephones are in Kabul, about 1 telephone for every 85 persons, and most of the remaining telephones are in the provincial capitals, including Kandahar, Herat, Mazar-i-Sharif, and Nangarhar. Rural areas have virtually no telephones. An earth satellite station installed with Soviet assistance in 1985 provides telephone and telegraph links with a limited number of countries. Functioning telex facilities exist only in Kabul.

It is reported that automatic telephone exchanges are in service in the main cities. However, the exchanges in Kunduz and Kundahar were damaged by recent fighting, thus reducing the total number of telephones in Kandahar from 1,500 to 140 and in Kunduz from 370 to 150. The Nangarhar telephone

system also sustained some damage in early 1990, and as a result its capacity declined from 1,000 lines to 700.

Most of the channel systems equipment and ordinary lines outside these provincial capitals have been destroyed or have disappeared. Communication between Kabul and the main urban centers controlled by the government is maintained through wireless systems. According to government data, about 258 wireless sets are operating throughout the country. All international mail to and from Afghanistan is currently routed through the Soviet Union.

The country's civil air transport has a fairly long history and was developed with American, Soviet, and World Bank financial and technical assistance during the 3 decades before the war. Before the war, it comprised 20 airports, of which Kabul was the most important. According to official statistics, in 1989-1990 the Kabul airport handled 196,000 passengers, and the total amount of cargo loaded and unloaded was estimated at 18,000 tons. No detailed information on the conditions and operations of domestic airports is available, but a mission from the International Civil Aviation Organization, which visited Afghanistan recently has concluded that 90 percent of the civil aviation buildings and communication infrastructure has been destroyed by the war. Training facilities have deteriorated and safety standards are not honored. The mission also stated that all capital stock was in poor condition and trained manpower was in short supply. The system will have to be reconstructed virtually from scratch.

### Public Health Sector

The level of health services available to the population was inadequate before the war and has deteriorated drastically over the past 12 years, particularly in the rural areas. In 1978-1979, there were 56 hospitals, 147 basic health centers, and 76 sub-health centers that provided health services to about 25 percent of the population. Approximately 49 percent of all hospital beds available to the public and administered by the Ministry of Public Health were located in Kabul. Likewise, about 50 percent of doctors practiced medicine in Kabul. All the medical facilities and programs were administered through the central government and a few NGOs. About 6 to 8 percent of the population had access to safe drinking water. The rural urban gap was phenomenal and widening.

The war has disrupted the few and infrequent rural health services that existed, and because of the rural-urban migration, a great strain has been placed on the urban health facilities as well. Some 6 hospitals and 118 health centers are reported to have been destroyed, and the remaining facilities are in a poor state of repair. The distribution of health facilities and personnel are skewed in favor of urban centers. In 1989-1990, about 2,987 of the nation's 5,182 hospital beds, or 58 percent, were located in Kabul and the remainder were located in a few urban centers controlled by the Kabul

government. Similarly, nearly 1,680 (78 percent) of the 2,218 doctors operating under the Ministry of Public Health served in the Kabul area. The heavy emphasis on urban health services is an indication of the fundamental bias of the health system toward curative health services. It also indicates that the Kabul government has very little control in rural areas.

Medical manpower is deficient in both number and quality. The ratio of medical support staff to doctors is estimated at 1.8:1, which is very low by any standards. A large number of qualified doctors and medical personnel have left the country and most of the country's medical personnel who remain are poorly trained or lack experience. It appears that between 700 and 1,000 doctors have left the country over the past decade, and the available training institutions are underequipped, understaffed, and without training material. Hospitals also operate inefficiently because of the lack of qualified medical staff, equipment, medicine, and the low level of hygiene. The average number of visits to the existing 92 basic health centers controlled by the Kabul regime has also remained low because of security conditions, inadequacy of transportation facilities, and lack of medical personnel.

As a result of these inadequacies, the health of most of the country's inhabitants continues to be poor. The main problems appear to be as follows:

- Sanitation is generally poor. Sewage runs in open trenches, and only about 30 percent of the population in Kabul and some major provincial cities have access to piped water.
- The incidence of malaria is on the rise, owing to the disruption of control mechanisms. Roughly 36,000 cases were reported in 1979 whereas 450,000 cases were reported in 1988.
- Tuberculosis is reported to be widespread, and the appropriate support in the form of trained manpower and equipment for treatment is lacking.
- Over the last 12 years, the nutritional status of vulnerable groups has declined markedly. According to a recent UNICEF survey, 28 percent of children in Kabul and Mazar-i-Sharif suffered from moderate malnourishment and 0.6 percent from severe malnourishment.
- In addition to infectious and parasitic diseases, which are prevalent among the population, war injuries have disabled hundreds of thousands of people. With continued warfare and the presence of mines in many rural areas, the number of disabled persons is increasing and this poses a special problem. Many women and children are without family support.

- Because of the increase in opium production, some people have become addicted to drugs and are in need of treatment.

In view of the foregoing constraints and problems, it has become increasingly clear that full reconstruction of the health care system at the country level can take place only with the return of peace and security in Afghanistan. In recent years, a large number of international and Afghan NGOs, supported by the UN system, A.I.D., and other donors, have offered medical assistance to rural areas in Afghanistan. According to the World Health Organization (WHO) health database, in 1990 there were nearly 1,000 health facilities in the country, including 54 referral hospitals and 924 basic health centers and clinics. The total number of health workers has been estimated at about 3,800. According to WHO, the health system in place is able to provide services to only one-third of the population inside Afghanistan.

The databases held by WHO, Management Sciences for Health (MSH), Agency Coordinating Body for Afghan Relief (ACBAR), and other relevant agencies will have to be coordinated and refined to serve as an effective basis for conductng current activities and planning future health care programs for Afghanistan. According to ACBAR's recent report, SCA is currently supporting about 2,000 health workers, medical doctors, nurses, and paramedics in all of the 29 provinces, including staff at 114 health centers and 35 sub-clinics.

Management Sciences for Health, supported by A.I.D., has so far trained 2,000 health workers and established 118 basic health centers, 20 comprehensive health centers, and 1,374 basic health posts. To train basic health workers, three Pakistan-based and five Afghanistan-based training centers have been established. It also supports a large provincial hospital and 9 rural hospitals with up to 20 beds each.

It should be noted, however, that in most cases the placement of health facilities has, to a large extent, been based on political decisions with little apparent relationship to population and needs. As a result, these facilities are unevenly distributed and a major portion of the rural population at the national level has limited access to the facilities in place. Most of the health posts or clinics supported by NGOs are still very rudimentary; there are no buildings, they lack beds and equipment, and few have experienced personnel or access to doctors.

In most parts of the country, health infrastructure has been severely damaged or totally destroyed. It is essential that a major program be undertaken to ensure its rehabilitation or reconstruction. During 1990, WHO supported the rehabilitation of the health network through NGOs. This program included the construction of 6 referral hospitals and reconstruction of 44 clinics and 7 health posts. WHO and UNICEF have also planned to support efforts for controlling malaria and tuberculosis.

It has been estimated that up to 2 million Afghans may be affected by some form of physical or mental disability. According to UNOCA, by the end of 1990 at least 50,000 Afghans had undergone the amputation of one or more limbs. About 40,000 have been fitted with artificial limbs, and an additional 7,500 are waiting to receive prosthetic devices. The need for such treatment will persist for many years to come. Currently, orthopedic treatment or counseling facilities in rural areas of the country are very limited. The programs sponsored by the UN system are intended to meet only a fraction of the minimum needs of the physically disabled for training, rehabilitation, and information. These programs are implemented through NGOs.

Over the last decade, thousands of health workers who received their short-term training during exile are now responsible for the implementation of basic health programs in the rural areas. The NGOs' training programs for health workers have been of varying quality and are not well standardized. Substantial retraining is often required to prepare them to handle even ordinary cases. There is also a need to train and retrain Afghan professionals and reduce the dependency on expatriate personnel.

During 1990, the Expanded Program for Immunization was extended to at least 17 provinces. According to WHO and UNICEF, the objective of the program in 1991 is to reach a total of 250,000 children under 2 years of age and 700,000 females (3 to 45 years old) in the rural areas of Afghanistan. This program is implemented through a large number of Pakistan-based NGOs, including MSH and AVICEN. However, these efforts have not yet been fully integrated into the program of health centers. Most of the vaccination centers do not have sufficient staff or refrigeration facilities.

The prevailing security conditions in the country have prevented the preparation and implementation of a comprehensive plan for the reconstruction of water supply systems vital to disease control. According to UNICEF, some 40,000 pumps are required for 60 percent coverage by the year 2000. Currently, repair and upgrading of existing water supply systems in Kabul and a few provincial cities have been assigned priority. In 1990, UNICEF provided assistance to the Kabul government in upgrading the capacity of local hand pumps production, for cost saving purposes, under the "water for all by the year 2000" strategy.

### Education Sector

In 1978-1979, more than 1 million children were being taught in primary and secondary grades by about 40,000 teachers. Enrollment at Kabul and Nangarhar Universities had reached 11,300, with women constituting 22 percent of the total. During the decade of the war, the educational system was seriously disrupted, first in the rural areas and later in the cities. More than 2,000 school buildings were destroyed and unknown thousands of experienced

teachers and school administrators were allegedly executed or forced to leave the country.

The basic education system, created by the Kabul regime after 1978, was similar to that of the Soviet Union. It involved 11 years of schooling—5 primary grades, 3 lower secondary, and 3 upper secondary. However, the regime adjusted the education system in 1989-1990 to suit its revised political objectives. The education system now in place is similar to the one in existence in 1977. It involves 12 years of schooling—8 primary grades and 4 secondary.

Official information on general education is unreliable and inconsistent. Unofficial sources suggest that in 1989-1990, primary enrollment had decreased to about one-third of the prewar level of 830,000 pupils. According to the official sources, however, 551,000 students were enrolled in primary schools during the same period. Evidence suggests that uncertain security conditions and social dislocation contributed to low school attendance. The existing schools are overcrowded, physical facilities are run down, and furniture and supplies are inadequate. The Kabul government has recently revised the curricula adopted in the early 1980s.

In recent years, a large number of NGOs have started supporting education activities inside Afghanistan. The Education Support Project assisted by A.I.D. has established a substantial network of primary schools inside Afghanistan based on 6 years of education. This project currently supports 1,291 primary schools in all the 29 provinces with a total enrollment of 168,000 pupils. The students are taught by about 7,000 Afghan teachers. Of the total number of schools supported under this project, 960 are schools with salaried teachers. The project has distributed 1.5 million textbooks for primary schools in Afghanistan and provided literacy training to 37,000 mujahidiin in their winter camps.

Similarly, the SCA has provided support to 88,110 students in 473 primary schools inside the country. The total teaching staff is reported to be 2,773. In addition, about 130,000 students are supported by other NGOs at the primary level. The overall impression is that NGOs are currently supporting about 380,000 children at 2,000 primary schools that they have established. This represents about 14 percent of the population in the 7 to 14 age group.

Although NGOs have been able to create a system of primary education in the rural areas, some aspects of these programs need to be improved if the effectiveness of the overall system is to be enhanced. One of the main issues has been the chronic shortage of qualified teachers at the local level. Yet teacher training and curriculum development for primary schools have not been standardized. A majority of the existing teaching staff do not have the qualifications required to conduct a formal teacher training program, and so far no workable plan has been submitted. Low teacher salaries, relative to

the rate of inflation, have not been conducive to attracting people into the teaching profession.

Vocational education is provided in 71 technical and professional schools. Vocational schools are concentrated in Kabul and in a few provincial cities. Total enrollment in these schools has dropped from 20,750 students in 1978-1979 to 14,795 in 1989-1990, a decline of about 29 percent. Similarly, the total number of graduates from these institutions has decreased—from nearly 2,000 in 1989-1990 compared with less than 4,300 in 1978-1979. The education provided in vocational schools is more academic and the graduates do not fit into required jobs in the private sector easily.

The vocational training system in place is reported to favor technical and mechanical skills at the expense of management training in crop and livestock husbandry. The system has been designed to provide manpower for the execution of highly capital-intensive projects through the public sector. This strategy is reflected in the number of "technicoms," the secondary vocational schools that have been built and supported by the Soviet Union. In 1978-1979 there were only two such schools, but in 1989-1990 there were nine. This allowed the total enrollment to increase from 1,700 in 1978-1979 to 4,444 in 1989-1990. The students were taught by 430 teachers, of which 85 were from the Soviet Union.

In the Pakistan refugee camps a large number of skilled workers have been trained under the training programs supported by various agencies, including UNHCR, ILO, and other nongovernmental organizations. In addition, thousands of the graduates of the vocational schools of Afghanistan have also migrated to Pakistan and Iran where job opportunities existed. According to a recent study conducted by UNRISD in Pakistan, of the 5,178 male refugees aged 12 or over, 17.4 percent possessed technical and mechanical skills.

The UN system has developed a number of vocational training projects, following assessment missions to Afghanistan. These projects are designed to provide short-term courses in vocational training for Afghans in both the urban and rural areas. ILO has so far organized three mobile training units in Afghanistan and four in refugee camps in Pakistan and developed plans for the vocational rehabilitation of disabled Afghans. UNDP has provided support to a management training program to strengthen the administrative capacity of Afghan NGOs, international NGOs, and other community development groups, including local *shuras*. However, *shura* management training programs should be further strengthened if the objective of the program is to be realized.

The Kabul government, with assistance from Soviet advisers, introduced significant changes in the structure and organization of Kabul University. The engineering faculty, which had been assisted by the United States for more than 20 years, was abolished in 1982. The faculty of medicine was placed under the direct control of the State Medical Institute and supervised by the Ministry of Public Health. The Soviet advisers introduced changes in the

curriculum of several of the faculties with a view to sovietizing them. A number of new faculties related to the social sciences were also created to provide training to members of the ruling party. It is reported that, during this period, 36 teachers were executed and 340 teachers had to leave the country. This was nearly 44 percent of the total teaching staff.

Currently, there are six institutions of higher learning in the country, namely, University of Kabul, Nangarhar University, Polytechnic Institute, Islamic University, Balkh University, State Medical Institute, and the Institute of Pedagogy. Combined enrollment in these institutions was 17,450 in 1989-1990. In spite of the population loss, this number was up from 11,300 in 1978-1979 for an overall rise of 54 percent. During 1989-1990, a total of 2,396 students graduated from these institutions, of which 381 were from the Faculties of Medicine, 365 from the Polytechnic Institute and Nangarhar Faculty of Engineering, 138 from the Faculty of Agriculture, and 33 from the Faculty of Pharmacy, Kabul University. The remaining 1,479 graduates were from all the other colleges.

The Kabul government reinstituted the Faculty of Engineering of Kabul University in 1989, but it would take many years to restore its prewar standard of education. Almost all universities and institutes lack teaching materials, books, equipment, and, above all, contact with outside intellectual communities. Most of the teaching staff are unqualified and belong to the ruling communist party.

In view of this situation, the increase in total enrollment has been accompanied by a lack of facilities and qualified teaching staff and, thus, the quality of education has fallen markedly. The decline will affect the development of Afghanistan for a long time.

### Industry, Mining, and Energy

During the two decades before the war, Afghanistan had accorded a high priority to the establishment of public enterprises in mining and manufacturing. In part, this reflected a poor investment climate and an unwillingness of the private sector to undertake new ventures in these fields without concessions or changes in government practices and policies. An A.I.D. industrial development project in the late 1960s and early 1970s assisted a number of new private enterprises, but ran counter to the prevailing direction of government policy. The state-owned enterprises often enjoyed a monopoly position in addition to being favored by administrative and financial concessions.

This policy of favoring state-owned enterprises was further strengthened in 1975 when banks were nationalized and a state monopoly in banking and heavy industry was introduced. The April coup of 1979 practically halted private enterprise activities. Since 1988-1989, the government

has adopted some measures to liberalize the economy and increase private sector participation in this area, but this shift in policy has been constrained by security conditions and the government's desire to continue its direct state economic management and control.

Most mining and manufacturing is still carried out largely through public enterprises. Although several new ones have been set up during the past decade, the increase in value-added contributed by such enterprises has not been great because in total they had already accounted for 80 percent of prewar manufacturing output. In 1989-1990, the value-added by all partial and wholly owned state manufacturing enterprises was up to 87 percent. The 34 public industrial enterprises in the country employ about 23,000 workers. Most of its enterprises are overstaffed and most of the workers are poorly trained. They operate like bureaucratic offices and until recently were subject to price controls. In 1987-1988, the number of registered private enterprises was estimated at 325, and they employed about 9,000 people.

Manufacturing has advanced very slowly (Table 3-4). The average annual growth rate has been about 1 percent over the last 12 years. Currently, most of the enterprises are operating at between 20 and 30 percent of their capacity because of shortages of raw materials, transportation difficulties, and security reasons. It is also reported that the condition of the existing factories and shops has deteriorated through neglect, lack of maintenance, shortages of skilled manpower, and reduced aid from the Soviet Union and other external sources. Most of the new industrial projects that were started before the war have remained unfinished.

Manufacturing is based largely on the processing of domestic raw materials, particularly agricultural raw materials. Thus, manufacturing performance has declined with the decline in agriculture. The steady decline in cotton production over the last decade has caused the output of textiles to drop to 30 percent of prewar levels and ginned cotton to fall to 13 percent. The drastic decline in the production of sugar beets has caused the operation of the Baghlan sugar factory, with a total capacity of 16,000 tons, to shut down completely.

The production of cement has also dropped sharply from a level of 127,000 tons in 1978-1979 to less than 104,000 tons in 1987-1988. It dropped further to 79,000 tons in 1990-1991. The fertilizer plant in Mazar-i-Sharif has, however, maintained full production because of the availability of raw materials and more favorable security conditions in the area.

Most of the causes for poor industrial performance is not new. Industrial development has long been constrained by a number of problems, including inefficient pricing policies, weaknesses in management, inadequacy of related laws, and interference by the central ministries in the day-to-day operations of the enterprises. As a result, the contributions of these

Table 3-4. Estimated Industrial and Mining Production, 1978/79-1990/91

| | Units | 1978/79 | 1987/88 | 1988/89 | 1989/90 | 1990/91 |
|---|---|---|---|---|---|---|
| **Mining and Quarrying** | | | | | | |
| Natural Gas | Mill.cub.met | 2461.0 | 1941.0 | 1005.0 | 220.0 | 370.0 |
| Coal | 1000 tons | 218.2 | 167.0 | 138.0 | 127.2 | 110.0 |
| Salt | 1000 tons | 81.1 | 15.4 | 37.0 | 28.0 | 24.0 |
| **Food Processing** | | | | | | |
| Wheat Flour | 1000 tons | 97.0 | 203.0 | 165.9 | 164.9 | 178.0 |
| Bakery Products | 1000 tons | 20.4 | 34.0 | 37.0 | 60.4 | 44.3 |
| Sugar | 1000 tons | 10.8 | 0.1 | 0.1 | -- | 0.1 |
| Vegetable Oils | 1000 tons | 10.3 | 3.3 | 2.0 | 2.0 | 1.0 |
| **Textiles and Leather** | | | | | | |
| Ginned cotton | 1000 tons | 41.6 | 8.2 | 7.7 | 7.9 | 5.6 |
| Cotton Textiles | Mill. met | 88.0 | 52.6 | 32.9 | 22.9 | 26.0 |
| Rayon Textiles | Mill. met | 11.7 | 3.4 | 0.3 | -- | 0.1 |
| Woolen Textiles | Mill. met | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 |
| Shoes (Leather)[a] | 1000 Pairs | 304.1 | 675.0 | 607.0 | 518.0 | 500.0 |
| **Chemical Products** | | | | | | |
| Chemical Fertilizer | 1000 tons | 105.7 | 123.4 | 117.0 | 105.2 | 105.0 |
| Petroleum Products | 1000 tons | 14.0 | 2.4 | -- | -- | -- |
| **Other** | | | | | | |
| Cement | 1000 tons | 126.5 | 104.0 | 70.0 | 68.0 | 79 |
| Electricity (official figure) | Mill. Kwh. | 845.4 | 1257.0 | 1109.2 | 1051.6 | 1045.5 |
| Electricity (adjusted) | Mill. Kwh. | 845.4 | 892.0 [b] | 800.0 [b] | 767.0 [b] | 760.0 [b] |

Sources: GOA, Central Statistical Office and Ministry of Planning.
[a] Includes production of the formal private sector.
[b] Based on unofficial estimates, as the official estimates are believed to be biased and inconsistent with the Government controlled installed capacity.

enterprises to revenues, capital formation, and even employment has remained relatively insignificant.

Handicrafts constitute about 60 percent of total industrial production and account for a significant proportion of earnings from traditional exports. The main handicrafts are carpets, rugs, fur coats, embroidery, and jewelry. This subsector urgently needs better technology, marketing facilities, and standardization, all of which have come under stress because of the war and population dislocation.

Over the last 12 years, total production decreased at an average rate of 2 percent and declined from Afs. 8,558 million in 1978-1979 to Afs. 6,536 million in 1990-1991. Recently, UNDP and UNIDO prepared plans to provide assistance for the promotion of handicrafts in Kabul and Mazar-i-Sharif. According to these programs, technical assistance will be extended for the establishment of 10 demonstration units. The emphasis of the program will be on promoting local capabilities to improve production methods, product quality, design, and exports.

Afghanistan has a wide range of mineral deposits with modest reserves. Most of these are in the central and northern regions of the country. The natural gas reserves have been estimated at about 130 billion $cm^3$ and iron ore reserves are estimated at 1.7 billion tons. The petroleum reserves that were discovered before the war are, perhaps, 12 to 18 million tons, of which 30 percent is believed to be exploitable. The country also has substantial quantities of copper (about 11 million tons) and coal, possibly as much as 600 million tons.

However, because of the lack of appropriate infrastructure, technical know-how, financial resources, and the limited domestic markets a very small portion of these reserves has so far been tapped. Mining activities are concentrated in the production of natural gas, coal, and salt; before the war mining of lapis lazuli in northeastern Badakhashan province had also been included in the programs of the central government.

Production from mining has declined sharply—an average rate of about 14 percent per year. This drop has been due mainly to the sharp decline in the production of natural gas. From 1978 to 1985, the production of natural gas had been maintained at about 2.6 billion $cm^3$ per year. Since then, output has dropped steadily to 1.9 billion $cm^3$ in 1987-1988 and further down to 1.0 billion $cm^3$ in 1988-1989. Official estimates suggest that production will be down to 0.4 billion $cm^3$ in 1990-1991 because of technical, institutional, and security problems. The Kabul government's attempt to resume gas exports in 1990-1991 did not materialize, owing to technical, institutional, and security reasons. Currently, gas production is limited to use for local power generation and fertilizer production.

The production of coal has also declined over the last decade. Coal production was down to 50 percent of the prewar level, which was 218,200 tons. The cement plant and the larger textile mills had used roughly 60 percent of the coal that was produced. The remaining 40 percent was consumed by other businesses and households. Currently, the iron works of Jangalak is an important consumer. The distance of the coal fields from major consuming centers have so far limited extraction to relatively small and lower quality deposits of Karkar and Dood Kash in Baghlan province, near Kabul.

The production of salt, too, has fallen. Last year, it was down to 30 percent of the prewar level of 81,100 tons.

Recently the Soviet Union developed a proposal for building a 50,000-ton oil refinery in Shabarghan province. The refinery was to use the small reserves of oil that had been discovered in the area before the war. There is no indication of when the plant will be built.

Electric generating capacity is currently estimated at about 410 MW, of which 254 is hydro, 48 gas, and the rest is diesel generated and includes the 40 MW power plant completed in Kabul before the war. Although it is reported that operating conditions of most power facilities have deteriorated during the decade because of lack of maintenance and spare parts, the contribution of electric power to gross domestic product has remained about constant. According to official sources, the potential for hydrogeneration is 5,000 MW. Both coal and gas can provide commercial energy and prevent destruction of forests.

Several power projects that had been planned before the war have not been implemented. The transmission line between Kajakai and Kandahar was destroyed early in the war. As a result, the Kajakai hydropower plant, which has a capacity of 33 MW has been unused for most of the past decade.

The Kabul government has procured more than 140 small diesel generators, mainly from eastern block countries, to provide electricity to the garrison towns in the border provinces under its control. In addition, two transmission lines have been built from the Soviet Union to Mazar-i-Sharif (220 kV) and to Kunduz (110 kV). As a result, electricity is already being provided to these towns.

Official government statistics show that Afghanistan imported 15 million kWh of electricity in 1986-1987 and 37 million kWh in 1987-1988. The price was set at $0.05/kWh. Since 1988-1989, the cost of imported electricity has been covered under the Soviet Union's commodity aid program.

Even before the war the supply of electricity was inadequate to meet demand. About 5 percent of the people had access to electricity, and 80 percent of electricity was generated in and around Kabul. Currently, the

power deficit in Kabul is estimated at 50 MW. With the heavy influx of people to Kabul and the poor condition of the power lines and generating facilities, Kabul residents today have access to electricity for only 5 hr a day on average. Supply of electricity is highly subsidized. Petroleum used for power generation has continued to be imported from the Soviet Union, presenting costly transportation problems. The electricity tariff of about Afs. 1/Kwh, which remained unchanged over the last decade, is too low to cover the operating costs of electricity supply.

In the early 1980s, the Kabul government significantly increased its control over public and private industrial enterprises. Prices and wages were strictly controlled and the enterprises were required to adhere to the physical targets set by the planning authorities. Since 1988-1989, there has been a renewed interest in private investment and economic liberalization. The recent events in Afghanistan and the Soviet Union were probably the primary reasons for the changes in the Kabul government's economic policies.

The purported Constitution of 1990 has given greater importance to private investment and introduced protection of private property. The government drafted a new private investment law to remove restrictions on private investment imposed by the private investment law of 1985. At present, at least on paper, all sectors of the economy, including banking, mining, and communication, are open to the private sector. The law also increased the maximum share of foreign investment from 49 percent to 100 percent.

A consultative economic council was set up to promote the private sector. The Central Office for Development and Promotion of Private Investment, which is now attached to the Prime Ministry, was created in 1988 for private investment promotion. The Industrial Development Bank provides credit to approved projects at highly subsidized rates. The price commission was abolished and public enterprises are allowed, in principle, to set prices and decide on production and investment plans.

However, in the absence of political, economic, and financial stability in Afghanistan, the new policy measures introduced by the Kabul government have so far proved to be illusive. Despite these measures, the government has continued its direct state economic management and control, and the existing laws still maintain restrictions on private investment. The government increased the total number of government and mixed enterprises from 31 in 1987-1988 to 34 in 1989-1990. Under the prevailing uncertain political, financial, and economic conditions in Afghanistan, divestment of public enterprises is proving a herculean task.

## Public Finance and Expenditures

In recent years the financial condition of the Kabul government has deteriorated. The growth of domestic revenues has been slower than that of ordinary expenditures with the result that the surplus, which once financed nearly 30 percent of development expenditures, turned into a deficit by the mid-1980s. In addition, development expenditures, which recently declined below the prewar level, are now totally dependent on funding from sources other than the revenue base (Table 3-5).

The overall budgetary deficit is estimated to have increased from 8.6 percent of GDP in 1978-1979 to 17.3 percent of GDP in 1990-1991. It was roughly Afs. 9.9 billion in 1978-1979 and is now well over Afs. 172 billion, representing 83 percent of total expenditure. External assistance has been insufficient to finance the growing deficit. Thus, the government has had to resort to heavy borrowing. This has fueled inflation, reduced the value of the Afghani, and jeopardized the nation's balance of payments. Last year, external aid and borrowing from the central bank financed about 80 percent of total expenditures, compared with 38 percent in 1978-1979 (Table 3-5).

Total domestic revenues, after having reached the level of Afs. 42.6 billion in 1987-1988, were only Afs. 39.8 million in 1988-1989 and were down further to Afs. 34.6 billion in 1989-1990. In 1990-1991, domestic revenues have remained constant. During much of the last 12 years, revenues have increased at an average annual rate of more than 6 percent in nominal terms. However, given the high rate of inflation, this represents an average annual decline of more than 12 percent in real terms. The revenue GDP ratio is estimated to have declined from 14 percent to about 3 percent during the same period.

The country's basic revenue structure has remained essentially unchanged although some variations in the relative importance of various sources of revenue have occurred. Not unexpectedly, non-tax revenues increased more than threefold during the past decade—from Afs. 7.0 billion in 1978-1979 to Afs. 21.6 billion in 1987-1988. This change meant that the relative share of non-tax revenues rose from 43 percent to 51 percent.

Most of this increase was attributable to higher revenues from the sale of natural gas to the Soviet Union. Sales rose from a prewar level of Afs. 2.6 billion to Afs. 10.4 billion in 1987-1988. In 1988-1989, however, revenues from the sale of gas to the Soviet Union fell by 55 percent from the previous year and in 1989-1990, receipts from exports of natural gas were fully curtailed. As a result, the relative importance of non-tax revenues fell to 34 percent. No detailed information is available on revenues for 1990-1991, but it appears likely that nontax revenues will have fallen even further because exports of gas to the Soviet Union have been virtually halted. The reasons for the curtailment of natural gas exports to the Soviet Union included concerns over security flooding of gas fields, lack of spare parts, and maintenance problems.

Table 3-5. Indicators of Government Budgetary Position, 1978/79-1990/91

(Values in Afs. millions)

| | 1978/79 | 1987/88 | 1988/89 | 1989/90 | 1990/91 [a] |
|---|---|---|---|---|---|
| Total Revenue | 16,446 | 42,565 | 39,792 | 34,597 | 35,200 |
| Tax Revenue | 9,449 | 21,000 | 21,372 | 22,803 | -- |
| Non-tax Revenue | 6,997 | 21,565 | 18,420 | 11,794 | -- |
| Ordinary Expenditures | 12,384 | 91,837 | 126,447 | 159,605 | 195,443 |
| Government Departments | 8,866 | 79,965 | 85,579 | 114,127 | 141,357 |
| Subsidies | 1,024 | 5,162 | 18,547 | 23,478 | 31,936 |
| Debt-payments (gross) | 2,494 | 6,710 | 22,321 | 22,000 | 22,150 |
| Current Balance | 4,062 | (49,272) | (86,655) | (125,008) | (160,243) |
| Development Expenditures | 14,013 | 24,500 | 23,669 | 8,860 | 12,100 |
| Budgetary | 6,845 | 14,828 | 12,963 | 6,596 | 9,500 |
| Project Aid (gross) | 7,168 | 9,672 | 10,706 | 2,264 | 2,600 |
| Overall Deficit | (9,951) | (73,772) | (110,324) | (133,868) | (172,343) |
| Financing: | 9,951 | 73,772 | 110,324 | 133,868 | 172,343 |
| Foreign: | | | | | |
| Project Aid (gross) | 7,168 | 9,672 | 10,706 | 2,264 | 2,600 |
| Commodity Aid and Grants | 1,746 | 16,991 | 47,420 | 37,438 | 20,733 |
| Domestic: borrowing from the banking system | 1,037 | -- [b] | -- [b] | -- [b] | 141,805 |
| other domestic revenues | -- | 17,360 | 12,420 | 14,096 | 7,205 |
| Memorandum Items | | | | | |
| Growth Rate of | | | | | |
| Current Revenues | (10.0) | -- | (6.5) | (13.0) | 1.7 |
| Current Expenditures | 3.6 | -- | 37.6 | 26.2 | 22.4 |
| Development Expenditures | 14.0 | -- | (3.4) | (62.5) | (36.5) |
| Kabul Consumer price Index (1978-79=100) | 100.0 | -- | 408.1 | 774.8 | 1,131.1 |
| Nominal GDP [c] (Afs. billion) | 116.2 | -- | 393.3 | 689.4 | 999.4 |

Sources: GOA Ministry of Planning and Central Statistical Office.
[a] Preliminary
[b] Since substantial extrabudgetary expenditures were incurred during this period, it is certain that the financial gap was much higher. No extra-budgetary expenditures were reported for 1990/91.
[c] GDP at constant prices was converted to nominal GDP using the Kabul price index as deflator.

Gross revenues from government enterprises contributed significantly to the steady rise in non-tax sources during this period. According to official data, gross income from these enterprises amounted to Afs. 4.3 billion in 1989-1990 compared with only Afs. 1.2 billion in 1978-1979. These increases resulted from the establishment of new enterprises and an upward revision in the prices of commodities that they sold—namely, sugar, gasoline, textiles, and electricity. Although data on net revenues from government-owned enterprises is not available, it is believed that this net contribution was negligible or even negative. Performance has been hampered by price controls, low capacity utilization resulting from shortages of raw materials, a lack of spare parts, and management problems.

With the decline in the relative share of natural gas sales, tax revenues have assumed increasing prominence in total revenues, increasing from 49 percent in 1987-1988 to 66 percent in 1989-1990, with non-tax revenues declining correspondingly.

The tax system is still heavily dependent on indirect taxes, which comprise taxes on external trade, taxes on goods and services, and stamp taxes. In 1989-1990, about 60 percent of tax revenues were generated from import duties. This resulted from an average rate of increase in duties of 10.7 percent per year as well as the increase of the valuation rate used for customs duty purposes and the effect of tariff increases in 1989. The valuation rate on imports in convertible currencies was raised from Afs. 174=$1 to Afs. 300=$1. The valuation rate on goods imported from the Soviet Union rose by about 14 percent from Afs. 70.2 per clearing dollar to only Afs. 80.0 per clearing dollar.

However, the growth in external trade taxes was limited by the use of exchange rates that did not reflect current market prices in valuing imports for tax purposes, the existence of specific duty rates for a number of goods, and a steady decline of imports since the mid-1980s.

Direct taxes amounted to Afs. 7.5 billion in 1989-1990, reflecting an annual average rate of increase of 10 percent from 1978-1979, measured in nominal terms. In real terms, direct taxes in 1989-1990 were about 38 percent of the prewar level. As a percent of total tax revenues, direct taxes increased from 27 percent to 33 percent over the same period. Most of the increase in direct taxes during this period originated from individual tax receipts and corporate income taxes. The government raised the corporate income tax rate from 20 percent to 25 percent. The increase in individual income taxes was associated with the impact of inflation on the tax base, as well as a sharp increase in the total amount of wages and salaries of government employees.

During the period 1978-1979 to 1990-1991, the government's ordinary expenditures, including foreign debt payments, increased sixteenfold—from Afs. 12.4 billion (10.7 percent of GDP) to Afs. 195.4 billion (19.6 percent of

GDP). Most of this rise resulted from increases in military expenditures, government employment, foreign debt payments, and subsidies paid to government-aided institutions. As in most countries' budgets, the level of military spending is not revealed clearly. However, statements made by several government officials suggests that it may be as much as 50 percent of the total budget. Because of the heavy burden of government operations and military costs, the share of the budget for social and economic services has generally been low, and the maintenance of public capital investment has been severely neglected.

The total cost of wages and salaries of government employees increased nineteenfold, from Afs. 4.5 billion in 1978-1979 to Afs. 88.7 billion in 1990-1991. Because salaries and wages of civilian employees have risen only modestly, and not at all in recent years, this sharp rise is attributable mainly to increases in the number of government employees, as well as a substantial wage increase for military personnel.

To cover the losses of public enterprises for the subsidized sale of their products, Afs. 23.4 billion was budgeted in 1989-1990 and Afs. 31.9 billion in 1990-1991. The latter amount was a thirty-onefold increase from 1978-1979. These subsidies were provided for fertilizer, fuel, transport, communications, food, electricity, and water supply.

Service on external debt rose from Afs. 2.5 billion in 1978-1979 to Afs. 22.1 billion in 1990-1991, indicating a ninefold increase from 1978-1979. Interest on external debt remained small because most external debts were extended to the government on highly concessional terms.

Development expenditures declined from Afs. 14.0 billion in 1978-1979 to Afs. 12.1 billion in 1990-1991 in nominal terms. In real terms, development expenditures declined to less than 8 percent of the prewar level. The limited implementation capacity and a shortage of domestic and external financial resources have been the major factors in the slow implementation of the development program, although other factors such as the uncertain security condition and the lack of skilled personnel also played a part.

Because the current account of the budget has had no surplus for several years, the entire development budget had to be financed. For the last 3 years, about 65 percent of the development budget has been met by project aid and 35 percent from bank borrowing.

The development program, prepared with the assistance of Soviet experts, is highly capital intensive and has a high import content. As in many other Third World situations, the development program is often prepared with little regard for the social and economic priorities of the country. Projects are, to a large extent, determined by the type of projects favored by the donor. Consequently, a large portion of resources are directed to

projects and activities that often compromise the goals and objectives of the nation in favor of the goals and objectives of the donor.

From 1977-1978 to 1989-1990, the 12-year cumulative total of investment expenditures for all sectors was about Afs. 181 billion. Still, the real rate of economic growth continues to be negative, suggesting that for whatever reasons the expenditures were ineffective or insufficient. The breakdown of total investment by major economic sectors during this period is presented below:

| | *Total Investment (Afs. billion)* | *Percent of Total* |
|---|---|---|
| Agriculture and Irrigation | 22.6 | 12.5 |
| Mines and Industries | 79.2 | 43.7 |
| Transportation and Communication | 42.8 | 23.6 |
| Social Services | 36.6 | 20.2 |
| Total | 181.2 | 100.0 |

As can be seen from the preceding table, between 1978-1979 and 1989-1990, for which detailed information is available, nearly 44 percent of total development expenditures were allocated to mining, industry, and energy. The major projects in the most recent budget for these sectors included:

- Extension of two power transmission lines from the Soviet Union to the towns of Mazar-i-Sharif and Kunduz and construction of related substations,
- Gas and oil exploration,
- Expansion of Jangalak iron works and auto repair workshops,
- Reconstruction of Kabul woolen textile factory,
- Reconstruction of gas pipeline between Afghanistan and the Soviet Union,
- Expansion of Mazar-i-Sharif wheat silo with a capacity of 40,000 tons,
- Installation of diesel generators in urban areas outside Kabul, and
- Reconstruction of cement plants in Puli-i-Khumri and Jabal-u-Sarag.

By contrast, agriculture constituted only 12 percent of the development budget, with investments concentrated in the expansion of state-owned farms, construction of the Balkh irrigation project, construction of offices for government-controlled agricultural cooperatives, and the establishment of agricultural mechanization stations, mainly in the northern provinces.

In the transportation sector, the highest priority was given to constructing a railway station at Torghondi and a port facility at Hairatan, establishing transport compounds, construction of a Jalalabad automatic telephone network, expanding the Kabul airport, and expansion of television and radio networks.

The highest priority in social services was given to the construction of prefabricated apartments in Kabul and expansion of that city's water supply system, construction of small water supply projects in urban areas under government control, and construction of a blood bank with a capacity of 6,000 liters per year. In the past decade, more than 6,000 apartment units were built in Kabul, mainly for the benefit of party members and high ranking government officials. Construction of a large number of structures for military and security purposes also absorbed a major portion of the development expenditures.

## Money Supply and Prices

The sharp rise in money supply and liquidity during recent years clearly reflects a rapid deterioration of the budgetary situation. Between 1978 and 1990 the money supply (M1) has increased tenfold, from Afs. 28 billion at the end of 1978 to Afs. 276 billion at the end of 1990, resulting in an average growth rate of 21 percent per year (Table 3-6).

A major portion of this increase has been attributed to heavy government borrowing from the banking system to support both the ordinary and the development budget. During the same period, net domestic borrowing increased fourteenfold while claims on the central government and nonfinancial public entities increased nearly nineteenfold. This demand for credit by the government restricted the availability of credit to the private sector.

Domestic liquidity grew at an average rate of nearly 20 percent per year during the 1978-1990 period. This growth, coupled with falling rates of production and economic activity, has become a major cause of rapid increases in the general level of prices.

During this period, the general price level, measured by the national consumer price index, increased at an average rate of more than 23 percent per year—the price of major types of food rose variously in the range of 21

Table 3-6. Monetary Survey, 1978-1990

(Values in Afs. millions)

| | 1978 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|
| Foreign Assets (Net) | 20107 | 25233 | 26112 | 20530 | 17835 |
| Domestic Credit | 22958 | 155306 | 210087 | 301077 | 331268 |
| Claims on central Govt. (Net) | 16177 | 126261 | 187496 | 274242 | 304358 |
| Claims on local Govt. | 11 | 374 | 358 | 503 | 505 |
| Claims on Non Fin. Pub. Ent. | -- | 14136 | 3016 | 4951 | 4923 |
| Claims on private sector | 6770 | 12699 | 17580 | 20012 | 20119 |
| Claims on other Fin. Inst. | -- | 1836 | 1637 | 1369 | 1363 |
| Money Supply (M1) | 28625 | 131419 | 179414 | 251062 | 276319 |
| Quasi-Money | 4826 | 21866 | 26732 | 31604 | 34055 |
| Domestic Liquiduty (M2) | 33451 | 153285 | 206146 | 282666 | 310374 |
| Import Deposits | 4961 | 13095 | 14006 | 14773 | 14178 |
| Other Items (Net) [a] | 4653 | 14159 | 16049 | -- [c] | -- [c] |
| Memorandum Items | | | | | |
| Percentage change in M1/Year | 20.5 | 54.4 | 36.5 | 39.9 | 10.0 |
| Percentage change in M2/Year | 16.3 | 50.6 | 34.4 | 37.1 | 9.1 |
| Percentage change in Consumer Price Index (Kabul) [b] | -- | 18.2 | 29.2 | 89.8 | 65.6 |

Source: Original data from International Financial Statistics, June 1991, page 82. For the 1978 data, see International Financial Statistics, 1989, page 189.

[a] Includes long-term foreign liabilities.
[b] Price indices are for the Afghan fiscal year ending March 20.
[c] Figures are preliminary and inconsistent.

to 25 percent with meats, fruits, and vegetables increasing the most (see Table A IV-4, Volume 2, Appendix A).

In Kabul, the consumer price index, covering 50 essential food and non-food commodities during the same period increased at an annual average rate of about 22 percent. Among major food items, the price index rose at an average rate of 23 percent for cereals, 27 percent for meats, and 21 percent for other food items. By comparison, non-food prices rose at an average of 20 percent per year (Table 3-7).

During the past 2 years, however, there has been triple digit inflation. The Kabul consumer price index rose 366 points in 1989-1990 and another 356 points in 1990-1991. These sharp increases were caused in part by the earlier mentioned revisions in the prices of commodities sold by government-owned enterprises. For example, the price of gasoline was raised from Afs. 8.5 to Afs. 30/liter at the beginning of 1986-1987. It was raised again in early 1989-1990 to Afs. 40/liter. Over the same period diesel oil prices were raised from Afs. 8 to Afs. 20/liter. Sugar prices were raised from Afs. 30 to Afs. 100/kg in the same time frame.

In order to keep the prices of essential consumer items below the market prices, a number of basic food items are supplied through a coupon system at highly subsidized prices or free of charge for military and civilian employees, as a supplement to their salaries. In 1989-1990, for which official data are available, the following food items were distributed:

- Wheat flour, 196,500 tons free of charge (market price Afs. 100/kg).
- Vegetable oil, 26,000 tons free of charge (market price Afs. 300/kg).
- Sugar, 85,000 tons at Afs. 30/kg (market price Afs. 300/kg).
- Coal, 26,000 tons at Afs. 10/kg (market price Afs. 20/kg).

The Kabul government has also continued to administer the retail prices of a large number of basic non-food commodities, such as coal, petroleum products, electricity, liquid gas, fertilizer, and cement. All these controlled prices are lower in comparison to market prices and are highly subsidized. Fertilizer was sold to dealers at Afs. 12,000/ton, whereas farmers obtained fertilizer at more than 60,000/ton. Cement is sold to government user agencies at Afs. 10,000 per ton and to the market channels at Afs. 20,000/ton.

Electricity tariffs have remained almost constant for households since 1976 and for commercial users since 1988. Currently, electricity is supplied to households at Afs. 1.5/kWh and to the commercial sector at Afs. 5/kWh, which is substantially lower than the international prices estimated at

Table 3-7. Kabul Consumer Price Index, 1985/86-1990/91 [a]

| Year Ended March | Total Index | Cereals | Meats | Fruits and nuts | Vege-tables | Other food items | Non food items |
|---|---|---|---|---|---|---|---|
| Index Number 1978/79=100 | | | | | | | |
| 1985/86 | 292.8 | 268.2 | 286.0 | 268.7 | 427.9 | 188.2 | 287.7 |
| 1986/87 | 267.3 | 301.2 | 299.1 | 266.7 | 304.7 | 224.7 | 274.8 |
| 1987/88 | 315.9 | 341.0 | 441.8 | 355.2 | 372.9 | 235.8 | 303.7 |
| 1988/89 | 408.1 | 490.0 | 681.9 | 452.6 | 598.0 | 294.3 | 370.0 |
| 1989/90 | 774.8 | 1037.0 | 1065.0 | 831.5 | 1128.2 | 788.4 | 587.7 |
| 1990/91 | 1131.1 | 1244.0 | 1806.0 | 1156.9 | 1097.7 | 970.1 | 935.0 |
| Percentage change from the previous year | | | | | | | |
| 1985/86 | 9.7 | 1.5 | 1.9 | 10.4 | 53.7 | -3.5 | 6.7 |
| 1986/87 | -8.7 | 12.3 | 4.6 | -0.7 | -28.8 | 19.4 | -4.5 |
| 1987/88 | 18.2 | 13.2 | 47.7 | 33.2 | 22.4 | 4.9 | 10.5 |
| 1988/89 | 29.2 | 43.7 | 54.3 | 27.4 | 60.4 | 24.8 | 21.8 |
| 1989/90 | 89.8 | 111.7 | 56.2 | 83.7 | 88.7 | 167.9 | 58.8 |
| 1990/91 [b] | 65.6 | 27.5 | 100.7 | 55.3 | -3.6 | 31.8 | 85.6 |

Sources: GOA Ministry of Central Statistics and UNIDATA.

[a] Includes a total of 47 items from 1985/86-1988/89. Since 1988/89 it includes 50 items. The relative commodity weightings were revised on the basis of a sample survey of households, income and expenditure in Kabul city during 1987. It is believed that in the new weighting system, more weight is assigned to those items whose prices are administered or highly subsidized by the government. As a result, these series cannot represent actual trends in the cost of living or measured rate of inflation. In the new index, expenditure on food items controlled by the government is 66 percent against 56 percent in the previous system.
[b] Covers April-December 1990.

$0.06/kWh. As a result of these price distortions, large amounts of subsidies emerged that are financed by the government at the cost of financial stability.

The pricing of agricultural products, with the exception of cotton, has been determined largely by market forces. However, competition has been restricted by a number of factors, including high transport costs, lack of security, and arbitrary taxes and regulations imposed by local authorities. Cotton is bought by the state at Afs. 92/kg and also ginned and exported by the government.

The Kabul free market for currencies has reflected the actual economic conditions as well as inflationary trends. Against the U.S. dollar, the value of the Afghani has depreciated more than eighteenfold over the last 12 years. The exchange rate was Afs. 38.9 per dollar in 1978-1979; during 1989-1990 it averaged Afs. 420, and in the following year it depreciated to Afs. 700. In early 1989, a new exchange rate, known as the commercial rate, was introduced. Initially, this rate was closely linked with the free market rate, but in the following months a significant difference developed between the two rates. By February 1991, the commercial rate was at least 16 percent lower than the free market rate, forcing exporters to shift export receipts to the free market. The official nominal exchange rate of Afs. 50.6 per U.S. dollar has remained unchanged since early 1982-1983.

For many years before the exchange liberalization measures introduced in 1989-1990, Afghanistan's exchange system comprised several officially determined rates. The basic official rate, which was substantially below the free market level, was widely applied so that exporters realized less for their exports than they would otherwise. This complex and cumbersome system of taxing exports and subsidizing imports was carried over from the 1960s.

In 1989 some policy changes were introduced by the Kabul regime, mainly because of the deteriorating economic conditions in the country. In early 1989, the officially determined rates were abolished, with the exception of the effective surrender rate for cotton, which was increased from Afs. 105/kg in May 1989 to Afs. 158/kg by the end of 1990. All convertible currency proceeds of exports were shifted to the commercial rate. By the end of 1989, most public sector transactions with the exception of foreign debt payments and a few other items were also shifted to the commercial rate.

However, exchange rates applying to trade under bilateral arrangements have continued to be administered separately. The rate for trade with the Soviet Union was increased from Afs. 70.2 per clearing dollar in 1988-1989 to Afs. 80.0 per clearing dollar in 1990-1991. Bilateral export proceeds, retained in the central bank's clearing accounts, can be converted to Afghanis at the rate applicable to that bilateral agreement, transferred by the holder of the account to any other party for financing imports, or can be used directly.

Four commercial banks are operating in Afghanistan: the Central Bank, which controls the money supply, and three specialized lending institutions, which provide credit for agriculture, industry, and construction, respectively. Most of the credit in agriculture is supplied by private lenders.

The loan portfolio of the Agricultural Development Bank declined from 1.8 billion Afghanis in 1981-1982 to 0.6 billion Afghanis in 1989-1990, reflecting security concerns that led to internal and external migration of farmers. The loan portfolio of the Industrial Development Bank increased during the same period from .62 billion Afghanis to 1.4 billion Afghanis. In real terms, however, both assets and loans outstanding declined markedly because of the rapid rate of inflation. Advances to small-scale enterprises, through the Development Assistance Fund established in 1977, remained constant at the level of 27 million Afghanis. Throughout this period, banks served as devices to implement control over public enterprises, rather than to create a market for long- or short-term funds.

No organized capital market has ever existed in the country because the capacity of domestic households and businesses to save is small. Government policy has been to encourage private savings, but so far there is little evidence that this is working. Interest rates charged by the specialized banks have remained constant. For commercial banks, the maximum interest rate on deposits of one year or more was increased from 10 to 12 percent. The maximum lending rate was raised from 12 to 15 percent. However, given Afghanistan's high rate of inflation, the real value of deposits and liquidity balances has declined sharply.

## External Sector

Afghanistan today is an import-oriented country with an increasingly widening gap between imports and exports. In order to meet the country's growing needs, the Kabul government has relied increasingly on economic aid from the Soviet Union. This situation has enabled the Soviet Union to lay the groundwork for the country's economic dependence for many years to come (Table 3-8).

It appears that Afghanistan had a reasonably comfortable balance of payments position before the war, as a result of remittances from Afghans working abroad, tourist receipts from convertible currency areas, and multilateral grant receipts. Total reserves had been rising and had reached $391 million by 1979. Since the early 1980s they have declined. In 1989-1990, the total was reported to be $244 million. Although the decline of imports in nominal terms during 1990-1991 and the existence of a highly favorable mechanism for amortization payments to the Soviet Union enabled the Kabul government to increase its convertible reserves somewhat, added shortages of consumer goods posed severe difficulties for the economy.

Table 3-8. Indicators of Developments in External Sector, 1978/79-1990/91

(Thousands of U.S. dollars)

| | 1978/79 | 1987/88 | 1988/89 | 1989/90 | 1990/91 [a] |
|---|---|---|---|---|---|
| Foreign Trade (Commercial) | | | | | |
| Trade with Soviet Union | | | | | |
| Exports (FOB), of which: | 112,322 | 323,053 | 246,447 | 107,450 | 112,600 |
| Natural Gas Exports | 53,018 | 204,538 | 93,230 | -- | -- |
| Imports (CIF) | 89,512 | 355,812 | 373,912 | 326,036 | 320,000 |
| Balance | 22,810 | (32,759) | (127,465) | (218,586) | (207,400) |
| Trade with Other Countries | | | | | |
| Exports (FOB) | 210,451 | 188,805 | 148,207 | 128,492 | 117,400 |
| Imports (CIF) | 330,413 | 370,214 | 320,497 | 355,174 | 350,000 |
| Balance | (119,962) | (181,409) | (172,290) | (226,682) | (232,600) |
| Total Trade | | | | | |
| Exports (FOB) | 322,773 | 511,858 | 394,654 | 235,942 | 230,000 |
| Imports (CIF) | 419,925 | 726,026 | 694,409 | 681,210 | 670,000 |
| Balance | (97,152) | (214,168) | (299,755) | (445,268) | (440,000) |
| External Aid | | | | | |
| Project Loans and Grants | 170,000 | 195,000 | 214,000 | 45,200 | 52,000 |
| Non-Project Loans and Grants | 65,000 | 250,000 | 260,000 | 198,104 | 230,000 |
| Debt Repayments (Balance of Payments) | | | | | |
| Principle | 43,000 | 134,200 | 231,900 | 303,500 | 453,000 |
| Interest | 15,000 | 11,300 | 11,500 | 7,900 | 8,900 |
| Debt service Ratio (%) | 18.0 | 28.4 | 61.8 | 132.0 | 200.0 |
| Debt Repayments (effected) | | | | | |
| Principle | 43,000 | 80,000 | 60,000 | 52,000 | 50,000 |
| Interest | 15,000 | 12,000 | 12,000 | 8,000 | 9,000 |
| Debt service Ratio (%) | 18.0 | 18.0 | 18.0 | 25.0 | 26.0 |
| Reserves, Excluding Gold | 390,560 | 279,680 | 261,120 | 243,690 | 266,000 |
| Memorandum items | | | | | |
| Exchange Rate-Afs/US$ | | | | | |
| Bazaar (Free Market) | 38.9 | 183.0 | 219.0 | 416.0 | 700 |
| Central Bank (Official) | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| Commercial Rate | -- | -- | 210.5 | 413.5 | 658.3 |

Sources: GOA Central Statistical Office, Ministry of Planning and International Financial Statistics, June 1991.
[a] Preliminary.

A recent IMF report estimated Afghanistan's current account deficit at $402 million in 1989-1990. This represents 156 percent of the value of exports. During 1978-1979, the deficit had been $225 million or 62 percent of total commodity exports and services. No final comparable data on the balance of payments are available for 1990-1991.

The indications are that the situation has deteriorated more rapidly during the past year. The gap between exports and imports has widened. From 1987-1988 to 1990-1991, the country's trade deficit increased from $214 million to $440 million—an average increase of 27 percent per year. This relatively high import dependence with its persistent deficit is causing severe structural imbalances in the economy.

The country's import capacity is quite limited. On average, over the past 3 years, exports were able to pay for only 42 percent of commercial imports. The balance had to be financed through nonproject assistance, mainly from the Soviet Union. It is obvious, however, that such large trade deficits are unsustainable even with past levels of external aid.

The immediate causes of the recent crisis in the country's balance of commercial trade has been the steady decline in the level of exports. Between 1987-1988 and 1990-1991 export earnings dropped sharply, from $512 million to $230 million, indicating an overall decline of 55 percent over the period. This sharp decrease in exports was a result of the fall of both natural gas and agricultural exports, exacerbated by difficulties in marketing to the Soviet Union as import decisions in that country had been decentralized and export credits that were granted by the Soviet Union in the past were drastically curtailed last year.

Export earnings from the sale of natural gas to the Soviet Union declined from $204 million in 1987-1988 to a low level of $93 million in 1988-1989. For lack of security, no gas was exported in 1989-1990. With the exception of wool, most other major commodities registered lower exports. The export of cotton declined by 91 percent—from $8.9 million in 1987-1988 to $0.8 million in 1989-1990, while exports of carpets and rugs fell by 22 percent—from $49 million to $38 million. The export of fruits and nuts fell by 6 percent in the same period—from $120.6 million to $113.8 million, and exports of fresh fruits were virtually halted because the country's trade route to Pakistan and India has been more frequently interrupted.

Afghanistan's exports have become extremely vulnerable because of the country's high dependence on the markets of the Soviet Union. The Soviet Union's share of the country's exports increased dramatically from 35 percent in 1978-1979 to more than 63 percent in 1987-1988. In 1988-1989, however, it remained constant, but in 1989-1990, it dropped to 46 percent as a result of the sharp decline in gas exports, which had constituted about 40 to 50 percent of total exports during this period.

Afghanistan's imports are dominated by essential commodities for direct consumption, some intermediate products, and capital goods. During the past 3 years, the total value of imports decreased from $726 million in 1987-1988 to $681 million in 1989-1990, and $670 million in 1990-1991, representing an average rate of about 2.5 percent per year. This reflects the nation's foreign exchange scarcity and its limited import capacity rather than the requirements of the economy.

Nonproject aid, primarily from the Soviet Union, financed a major part of the requirements for foodstuffs, petroleum, and other essential commodities. These imports for consumption allowed the division of funds for imports of capital foods, particularly vehicles, through commercial channels. According to official statistics, in 1989-1990 the Soviet Union supplied 210,000 tons of wheat, 55,000 tons of sugar, and 449,000 tons of petroleum products to the Kabul government under its commodity aid program. Dependence on the Soviets increased through the decade of the 1980s. The Soviet's share of total imports rose from a low level of 21 percent in 1978-1979 to more than 49 percent in 1987-1988. It has, on the average, remained about constant since then.

In recent years, there has been a considerable shift from imports of commodities for direct consumption to imports of capital goods, mainly in the form of transport equipment. As a percentage of total imports, the value of consumer goods, such as foodstuffs, textiles, medicinal products, and similar items dropped to 32 percent in 1989-1990. The value of consumer goods had been 44 percent in 1978-1979. In contrast, the relative share of capital goods rose from 12 to 42 percent.

Total nonproject assistance, mostly in the form of commodities, has increased substantially over the past decade. It rose from $65 million in 1978-1979 to $250 million in 1987-1988. In subsequent years, nonproject assistance averaged $230 million per year. The main objective of commodity assistance was to contain domestic inflation and provide resources for financing the local cost of the Soviet-assisted development projects. It also enabled the Kabul government to service Russian loans.

Total project aid increased to $195 million in 1987-1988 from $170 million in 1978-1979. However, after reaching a peak of $214 million in 1988-1989, it dropped to only $52 million in 1990-1991, reflecting difficulties in project implementation, security conditions, and the lack of financial resources. A major portion of project aid came from the communist bloc countries, especially the Soviet Union, which financed 85 percent of total project assistance over the period. The major strategic objective of project aid from the Soviet Union was to foster economic integration and Afghan economic dependence.

Information on Afghanistan's public debt is sketchy and conflicting. However, evidence suggests that the country's external debt has grown rapidly during the past 12 years. Outstanding public debt, including undisbursed funds, was $1.7 billion in 1976-1977. By the end of 1989-1990, it was up to $3.6 billion. Of this latter total, $2.6 billion was disbursed and the remaining $1.0 billion was undisbursed.

However, even IMF-reported debt statistics should be used with caution, given the uncertainty of the data. For example, last year total debt outstanding reported for 1989-1990 was $4.6 billion, that is, an estimate that was $1 billion greater than the current estimate for that year. It might be speculated that either the government may have made a very large accounting adjustment (for example, concerning a revaluation of the ruble) or that items previously treated as loans were subsequently redefined as grants or made subject to some form of debt forgiveness.

As expected, most of the outstanding debt (73 percent) is owed to the Soviet Union. Czechoslovakia accounted for 3.4 percent of Afghanistan's outstanding debt. There were modest increases in the outstanding obligations to the Federal Republic of Germany and Saudi Arabia and a steady decline in debt to the United States. It should be noted, surprisingly, that between 1986 and 1990, the disbursed portion of total debt owed to Saudi Arabia increased from $23.2 million to $29.6 million, reflecting disbursement of commitments before the war. The Kabul government reports that it received about $1.6 million from Kuwait, also reflecting disbursement of Kuwait's commitments before the war (see *Government of Afghanistan Statistical Yearbook*, 1989-1990, page 189).

The debt service ratio from 1978-1979 to 1987-1988 remained manageable, owing mainly to the generally soft terms of the loans and repeated reschedulings by the Soviet Union. In the last 4 years, however, debt service obligations have risen, as earlier loans have fallen due, and in 1990-1991, debt payments exceed aid inflows for the first time. During 1990-1991, debt service payment amounted to $462 million, of which $423 million constituted payments to the Soviet Union. On this basis, the debt service ratio rose to 200 percent of exports.

However, in recent years, amortization payments to the Soviet Union have been charged to Afghanistan's bilateral account with that country, resulting in an increased debt balance rather than in real resource transfer, leaving gross external reserves nearly intact. Thus, Afghanistan's effective debt payment obligations are much lower than the amounts reflected in the balance of payments account (Table 3-8). Available data indicate that Afghanistan's bilateral liabilities increased from $90 million in 1988-1989 to an estimated $700 million in 1990-1991. On this basis, the country's effective debt service ratio during 1989-1990 and 1990-1991 amounted to 25 and 26 percent, respectively.

## Conclusions and Prospects

The past 12 years have dashed the immediate hopes of Afghanistan for continuing the progress that was on the horizon before the war. The social and economic crises that the nation now faces must be overcome before serious progress can resume. The country's productive capacity must be restored and its economic and social environment must be normalized through political stability and policies that are conducive to restructuring and growth. As part of this, the effectiveness of public and private institutions must be improved even beyond their prewar level, and the cadre of professionals that have left the country must be encouraged to return or be replaced.

The prospects for political stability and the return of millions of Afghan refugees to their homeland are no brighter today than they were 15 months ago. Should the current situation continue for long, even a reversion to the prewar economy would not provide conditions conducive to the return of refugees from Pakistan and Iran.

Some important constraints to restructuring are described below.

- The current political structure of Afghanistan is highly fragmented. The Kabul government exercises little control outside of Kabul and a few provincial towns. The AIG has little or no presence inside the country and so far has failed to set up the necessary administrative structures needed to coordinate the reconstruction effort.

- Afghans have become donor dependent. The Kabul government is dependent on the Soviet Union for essential commodities, capital, and technical assistance. The AIG and the reconstruction program supported by nongovernmental organizations is financed by outside assistance. The Afghan refugees in Pakistan and Iran are largely dependent on external assistance.

- The country has lost many of its experienced administrators and technical personnel. A shortage of skills has already constrained the planning and implementation of a rehabilitation strategy.

- Statistical information and economic data are extremely poor for making realistic assessments of the current economic situation.

- Rural economic progress on which the country depends as the base for development is hampered by a harsh environment; uncertain personal security; shortages of animal and tractor power

for cultivation; shortages of labor; limited agricultural services; and a lack of credit, technology, and husbandry skills.

- Transportation is perhaps the most critical constraint to the economic and political integration of the country and its rehabilitation. The lack of roads and other communications linking many of the settlements in the country also impede the delivery of adequate education and health services.

Given these constraints, the task of designing and implementing an effective strategy and program for the rehabilitation of the Afghan economy is formidable. In mid-1988, the United Nations assumed the responsibility for coordinating the relief and reconstruction activities in the country. The UN program was based on the assumption that with the signing of the Geneva Agreement resulting in the Soviet troop withdrawal from Afghanistan, refugees would return to their homes in large numbers and in a relatively short period of time. The expected repatriation has not materialized because of the security conditions and inability to find a peace formula acceptable to the various segments of the Afghan society. In any event, the resource base of the UN program contracted from that anticipated, with agencies involved unable to undertake rehabilitation on a scale effective in promoting the process of refugee return.

Although mechanisms for resource mobilization and coordination are now in place, implementation of the proposed programs has been severely constrained by a number of logistical, financial, and institutional problems. In particular, the responsible agencies have not yet been able to implement the proposed relief and rehabilitation programs through direct support. As a result, a number of NGOs operating out of Pakistan have played an increasingly important role. However, the monitoring capacity in place within the agencies has been minimal, and so far no standards for a wide range of economic activities exist.

The activities of the NGOs are concentrated in the area of agriculture, public health, education, and rural works. Although the overall priorities are consistent with the needs of the country, the NGOs' capacity for implementation is limited. Furthermore, most of these organizations are operating as providers of free goods so that their programs are not acting as catalysts for economic recovery. The current method of providing agricultural inputs and economic assistance—free of charge to the Afghan community—is not sustainable, and may create overdependence on outside aid for an extended period.

The United Nations-supported program is carried out in a piecemeal manner rather than through a well-developed overall strategy. The NGOs also lack coordination and direction so that their effectiveness is reduced. There is clearly a great need to outline an integrated development strategy for guiding resources to their best and most effective use.

This situation leaves Afghanistan's economic future in considerable doubt. The prospects for economic recovery depend not only on the return of peace and personal security but also on a stable representative government to design and implement appropriate policies and strategies for the return of the refugee population and for the speedy recovery of the economy. Given the current low level of economic activity, Afghanistan faces a difficult economic situation for many years to come.

One plausible but optimistic scenario for the period between 1990-1991 and 1993-1994 suggests that the total gross domestic product could grow at a rate of 4 percent per year (Table A II-3, Volume 2, Appendix A). This would raise aggregate production to about 85 percent of the prewar level. The success of this scenario depends on many favorable occurrences the most important of which is a return to normal political conditions within a year. It will also require substantial economic assistance to support the restoration of productive economic activity.

To make this a reality, increases in agricultural production would have to lead the way with an average growth rate of well over 5 percent. In 3 years this would put farm output at a level of about 83 percent of what it was in 1978-1979 so that food would still be in short supply and would have to be supplemented through imports—an equivalent of about 700,000 tons of wheat. This assumes that the in-country population will grow at a rate of about 2 percent per year and that 34 percent of the refugee population will return to their homes during the 3-year period.

Because the growth of the tax and revenue base tends to lag development, the large budgetary deficits that have accumulated during the past decade are not going to be eliminated even under the postulated optimism of this scenario. Thus, much foreign assistance will be required to fund the reconstruction effort and provide essential commodities and inputs. Transportation and communications will also require special attention. The future government of Afghanistan will have to curtail subsidies and military expenditures with a view to reducing its dependence on borrowing from the banking system and stabilizing the country's fiscal balances.

The overall deficit in the country's external trade will undoubtedly widen. An important factor will be the restoration of high-level gas exports to the Soviet Union. There is substantial uncertainty surrounding this potential. The postulated return of 34 percent of the refugees to their homes and the associated requirements for housing, amenities, and job creation would call for substantial increases in imports of both capital and consumer goods and of agricultural inputs. The prospects for significant increases in export earnings in the medium term is limited because of supply side rigidities.

The government will be expected to present an integrated development strategy and to carry it out to meet the basic needs of the people. On the macroeconomic side, the government will be expected to adopt measures to

improve the financial and external balances by pursuing prudent fiscal, monetary, and trade policies. On the micro side it will be expected to provide access to capital and technology that will create job opportunities and raise the incomes of the people. This will require a reform of the civil service and improvements in its capacity to carry out the functions of government efficiently and effectively. However, given the scarcity of skilled and trained personnel, economic management will always be a bottleneck. Serious consideration should therefore be given to a shift to private sector participation in a wide range of economic activities and services for stimulating economic restoration and economic growth.