

# **National Human Development Report Republic of Moldova ( Revised version )**



**undp**



**Chisinau, Moldova 1995**

<p><b>FIRST NATIONAL CONFERENCE ON SUSTAINABLE HUMAN DEVELOPMENT ORGANIZING COMMITTEE</b></p> <p>Grigory Ojog, Vice Prime Minister          Andrei Andriesh, President, Academy of Science of Moldova</p> <p>Sergiu Radautsan, Academy of Science of Moldova          Alexandra Roshka, Academy of Science of Moldova          Sergiu Chirca, Academy of Economic Studies          Nadejda Shiskan, Academy of Economic Studies          Vladimir Iacovlev, National Institute of Ecology          Ion Chebotaru, National Institute of Ecology</p>	<p><b>UNDP MOLDOVA SUSTAINABLE HUMAN DEVELOPMENT TEAM</b></p> <p>Winston Temple,          Resident Coordinator,          United Nations/Moldova</p> <p>Larissa Atamaniuc,          NHDR Project Coordinator</p> <p>Barbara Brittell, Project Consultant</p>
---	---

<p><b>REPORTS TO THE FIRST NATIONAL CONFERENCE ON SUSTAINABLE HUMAN DEVELOPMENT</b></p>	
<p>Eugen Hrischev, Academy of Economic Studies          Sergiu Chirca, Academy of Economic Studies          Nadejda Shishcan, Academy of Economic Studies          Andrei Andriesh, Academy of Sciences of Moldova          Victor Chiobanu, Academy of Sciences of Moldova          Haralambie Corbu, Academy of Sciences of Moldova          Sergiu Radautsanu, Academy of Sciences of Moldova          Alexander Roshca, Academy of Sciences of Moldova          Alexander Zavtur, Academy of Sciences of Moldova          Ion Bostan, Chisinau Technical University</p>	<p>Arcadie Capcelea, Dept. for Environmental Protection          Anatol Gudym, Ministry of Economy Nicolae          Bucum, Ministry of Education Vladimir Gutsu,          Ministry of Education</p> <p>Alexei Rusu, Ministry of Health Eugenia          Mihailov, Ministry of Labour, Social Protection          and Family Ion Chebotaru,          National Institute of Ecology          Ion Dediu, National Institute of Ecology Vladimir Iacovlev,          National Institute of Ecology</p>

Comments on this report may be forwarded to the attention of:

**UNDP Moldova**  
 31 August str., #131  
 Chisinau, 277012  
 Republic of Moldova

*The Government of the Republic of Moldova and the Office of UNDP Moldova sincerely thank the Government of Japan for their financial support for this National Human Development Report initiative.*

*Picture on the cover page of this report was made by Alexei Katalnikow, a Moldovan artist who represented therein an idea of Moldova's transition process. The stork (Moldova's national symbol dating back to the XVth century) is flying out of the darkness towards the light, i.e out of economic hardships and social distress towards the nation's revival and prosperity*

## Foreword by Mr. Winston Temple, UN Resident Coordinator of the Republic of Moldova

The Republic of Moldova, since achieving its independence in August 1991, has faced a long and arduous road of transformation. The three-faceted transition process -- to independence, democracy and free market economy - while unquestionably essential for the nation's future stability and prosperity, has nevertheless resulted in a difficult situation for the Moldovan people. This difficulty is, fortunately, tempered by their strong potential.

Moldova's hope for the future is founded in its unwavering quest for development. In this regard, the Republic has four significant resources upon which it can depend for change. The first is its geographic and multi-ethnic character. Located on the boundary of Europe and the former Soviet Union (FSU), with Romania to the west, and Ukraine on the north, east and south, Moldova has the cultural, linguistic and geographic potential, as well as the historical experience, for successful economic and political interaction with its neighbors. Second is Moldova's agricultural potential, based upon its fertile soil. Third is its industrial potential — most significantly advanced in the areas of electronics and agroindustry — the foundation of which was laid during the Soviet era. And fourth, and most significant, is Moldova's human potential — in the form of scientists, a highly skilled workforce, and a well-educated public, who serve as the essential human resources — the core of Moldova's successful development. It is this latter resource upon which Moldova depends for its management and development.

It cannot and should not be forgotten, in this difficult era facing Moldova, that it is the people who are the objective, the center, and the means of Moldova's successful transformation, and, ultimately, its development. The preparation of this report, the First National Human Development Report of the Republic of Moldova, has been an essential step in reevaluating this truth, and the nation's transition strategy, in order to ensure that Moldova's development is a sustainable and human-centered one.

On February 22-23, 1995, Moldova held its first National Conference on Sustainable Human Development, with the participation of the President of the Republic of Moldova, high level governmental and ministerial officials, and respected national scientists and academicians. This conference served as a forum in which to candidly review Moldova's development challenges and to propose means for promoting sustainable and effective human development. It is from this conference - from the proposals and analysis of some of Moldova's most significant human resources that this First National Human Development Report has been conceived. From the lessons learned and communicated herein — both hopeful and sobering -- sprouts Moldova's development strategy. In this fertile soil of Moldova's potential, it will serve as a guide in the Republic's transition process, and its pursuit of sustainable human development.

*Winston Temple  
UN Resident Coordinator  
of the Republic of Moldova*



# Table of Contents

## **Chapter 1: Sustainable Human Development: A Global Concept and Its Application to Moldova**

The Republic of Moldova: A Commitment to Independence  
and Development  
Universal Human Rights: The Foundation of  
Sustainable Human Development  
Peace, Justice, Freedom and Gender Equity  
The Evolution of the National Human Development Report

## **Chapter 2: Independence, Democracy and Market Economy: The Impact of Moldova's Tri-faceted Transformation**

The Three Faces of Transformation  
To Independence and Democracy  
To a Free Market Economy  
National Human Development Priorities: The Balance to  
Ultimately Achieve SHD

## **Chapter 3: Sustainable Human Development in Moldova: The Past, Present, and Potential Situation**

Sustainable Human Development Potential  
Demographic Trends: An Insight into Human Development  
Births & Mortality  
Declining Birth Rate

- Rising Death Rate
- Ageing Population
- Increasing Migration
- Racial/Ethnic Statistics
- Overall Standard of Living
- Strong National Potential
  - Human/Intellectual Potential
  - Natural Resources
  - Economic Resources

## **Chapter 4:**

### **The Path for Sustainable Human Development: The Civil, Political, Social and Environmental Potential of Moldova**

- Strategies and Potential for the Achievement of SHD
- Freedom from Discrimination
- Ethnic Tolerance
- Gender in Development
  - Women's Access to Education
  - Violence Against Women
  - Women's Health and Reproduction
- Freedom of Movement
  - International and Inter-Republican Migration
- Right to Own Property
- Freedom of Opinion, Expression, Assembly and Participation in Elections
- Overview of the Political Sector
  - Strengthening of the Parliament
  - Strengthening of the Judiciary
  - Strengthening of the Local Governments
  - Strengthening of the Academy of Public Administration
  - Strengthening of the Department for Statistics
  - Introducing the role of the Ombudsman
  - Government watchdogs, NGOs and the press
  - Social reform reinforces Government capacity
- Right to Employment, Including Equal Pay, Dignity of Work, Trade Unions and Unemployment Support
  - Unemployment
  - Pensioners
- Right to Education



- Strategy for educational reform
- Right to Health
  - Substance Abuse
  - Environmentally-Related Illness
  - Goals for Reform
- Right to Environmental Safety
  - Plans for the Environmental Future
  - Water Resources
  - Land and Soil Preservation
  - Air Quality
  - Energy
  - Waste management

## **Chapter 5: Sustainable Human Development in Moldova: Prerequisites to Sustainability**

- Prerequisites to Sustainable Human Development
- Economic Reform
  - Moldova's Economic Model
  - Actions Required for Further Economic Reform
- Industrial Development
  - Technical Reform in Industry
- Energy Reform
- Research and Development
- A Plan for International Assistance

## **Chapter 6: Human Development Indicators for the Republic of Moldova**

- Trends in Economic Development
- National Items of Revenue
- Balance of Natural Resources
- Military Expenses and Uneven Use of Resources
- Unemployment
- Employment (in industry )
- Formation of Human Capital

Education  
Medicine and Health Protection  
Demographics  
The Situation of Women  
Human Development Tendencies  
Human Crises  
Human Development  
Indexes of Human Development

**Bibliography**





## **Sustainable Human Development: A Global Concept and Its Application to Moldova**

### **The Republic of Moldova: A Commitment to Independence and Development**

The Republic of Moldova is a newly independent republic which proclaimed its independence on August 27, 1991. This proclamation was quickly followed by basic political and legislative reforms which served as the foundation of Moldova's sovereignty.

In the three and a half years since these first significant steps towards independence and sovereignty, Moldova has progressed and continues to progress in its transformation process - from dependent to independent statehood; from a centrally managed to a free market economy; from a communist to a democratic political system.

The difficulties of this tri-faceted transformation have been further complicated by a number of issues, including: the change in Moldova's official language - from Russian to Romanian - and the administrative and ethnic challenges this change has wrought; the eruption of political factionalism in the east and south of the Republic (in the Transnistrian and Gagauzian districts, the former of which briefly escalated into armed conflict in the summer of 1992); the presence of a foreign military presence - the 14th Russian Army - on Moldovan territory; the onslaught of untimely natural disasters - in the form of droughts, floods, hurricanes and damaging frosts which have wreaked havoc particularly to the agricultural sector of the country; and the effects of decades of environmental abuse, which have served to significantly disrupt the ecological equilibrium of the country, and all living

Despite the tremendous magnitude of Moldova's tri-faceted transition process, complicated by the above-mentioned factors, the country's reform process is underway. Yet while significant progress has been made, an equally significant amount remains to be achieved.

The first stage of Moldova's transition has resulted in a high level of social distress. The slow pace of reform, while steady, has been accompanied by a declining standard of living, a growing unemployment rate, and a significantly decreased capacity of the social safety net to support the increasing size of the nation's vulnerable population.

Nevertheless, as will be demonstrated within this report, the Government of Moldova is committed to the achievement of a healthy and progressive level of national development, which is human-centered, economically and environmentally sound, and, ultimately, sustainable. The guarantee of Moldova's development potential lies 1) in the republic's significant human potential - its highly qualified scientific and intellectual community, its technically skilled workers, and its highly literate population; 2) in its economic potential - its agricultural system, its industrial capacity and experience, and its scientific and technical expertise; and 3) in its commitment to achieving economic, political, social reform, demonstrated firstly in the 1991 declaration of independence, and subsequently in the ongoing process of transformation.

## BASIC FACTS ABOUT MOLDOVA

### POPULATION

Estimated population, 1 994 (millions)	4,348
Average growth rate p.a., 1 985-94 (%)	0.6
Population density, 1994 (persons/sq.lan.)	129

### POPULATION DISTRIBUTION (%)

Rural	53
Urban	47

### GENDER DISTRIBUTION, 1991 (%)

Males	48.0
Females	52.0

### AGE DISTRIBUTION, 1994 (%)

Below working age	2.9
Working age	55.3
Above working age	15.8

### ETHNIC DISTRIBUTION, 1989 census (%)

Moldovans	64.5
Ukrainian	13.8
Russian	13.0
Gagauz	3.5
Jews	1.5
Bulgarians	2.0
Others	1.7

### LANGUAGE GROUPS (%)

Romanian	62.7
Russian	21.8
Ukrainian	9.8

### EDUCATION, 1992

Average years of schooling	6.0
Adult literacy rate (%)	96.0

### HEALTH

Population per doctor, 1 990	249.0
Infant mortality rate, 1 992 (per 1,000 live births)	23.0

### LIFE EXPECTANCY AT BIRTH, 1993

Average	68.3
Males	64.3
Females	71.1

### ECONOMY

GNP total, 1991 (US\$ billions) <sup>1,2</sup>	7.48
GNP per capita, 1991 (US\$) <sup>1,2</sup>	1,700
Real GDP per capita, 1991 (US\$)	3,500
Average annual growth of GDP, 1991 -92 (%)	2.1
Average inflation rate, 1 992 (%)	1,060
Unemployment rate, 1 993 (%)	1.014

### Sector shares of employment, 1992 (%)

Agriculture	36
Industry	28
Services	36

### Main trading partners, 1994

Inter-CIS	Russia, Ukraine
Extra-CIS	Romania, Germany

### Exports, 1994 (millions of lei)

Inter-CIS	1658.6 (food industry, light industry, machine building and metalworking)
Extra-CIS	659.9 (food industry, light industry, energy)

### Imports, 1 994 (millions of lei)

Inter-CIS	1986.3 (light industry, energy, machine building and metalworking)
Extra-CIS	747.6 (light industry, agricultural products, machine building and metalworking)

### HUMAN DEVELOPMENT RANK, 1994

75/173

<sup>1</sup> Information provided by the World Bank.

<sup>2</sup> The UN office within Moldova considers these GNP figures to be overvalued.

Figure 1.2

The Universal Declaration of Human Rights Adopted  
December 10, 1948 by the UN General Assembly

Articles 1-2 (Overview of Rights): State that all persons are "born equal in dignity and rights" and are entitled to all the rights and freedoms set forth in the declaration without distinction of any kind such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, or other status.

Articles 3-21 (Civil and Political Rights): Set forth human civil and political rights, which include: the right to life, liberty and the security of persons; freedom from slavery and servitude; freedom from torture or cruel, inhuman or degrading treatment or punishment; the right to recognition everywhere as a person before the law, the right to an effective judicial remedy; freedom from arbitrary arrest, detention or exile; the right to a fair trial and public hearing; the right to be presumed innocent until proven guilty; freedom from arbitrary interference with privacy, family, home or correspondence; freedom from attacks upon honour and reputation; the right to protection of the law against such attacks; freedom of movement; the right to asylum; the right to a nationality; the right to marry and found a family; the right to own property; freedom of thought, conscience and religion; freedom of opinion and expression; the right to peaceful assembly and association; and the right to participate in government and to have equal access to public service.

Articles 22-27 (Economic, social and cultural rights): the right to social security; the right to work; the right to equal pay for equal work; the right to form and join trade unions; the right to rest and leisure; the right to a standard of living adequate for health and well-being; the right to education; and the right to participate in the cultural life of the community.

Articles 28-30 (Social and International rights): recognize that everyone is entitled to a social and international order, which permit the realization of the rights set forth herein; that these rights may only be limited for the sole purpose of securing recognition and respect of the rights and freedoms of others; and that each person has duties to the community in which she or he lives.

## Universal Human Rights: The Foundation of Sustainable Human Development

On March 2, 1992, the Republic of Moldova was designated a member state of the international peacekeeping and development body of the United Nations (UN). Inherent in Moldova's acceptance of this membership was its commitment to honour and uphold certain internationally recognized obligations. One such

Figure 1.3

Human Development (HD) is a process providing a wider range of opportunities available for each person. These opportunities should realize three essential conditions: 1) a long life and a good health; 2) the accessibility of knowledge; and 3) access to the necessary resources providing for an adequate living standards. The human development concept also implies such fundamental aspects as political, economic and social freedom, creativity, mutual respect and the guarantee of fundamental human rights. Human development focusses on the individuality of the human being. The human being is not only an agent of development, but also its recipient.

*Ion Chebotaru National  
Institute of Ecology*

Figure 1.4

Sustainable Development (SD) is a process in which economic, fiscal, trade, energy, agricultural and industrial policies are all designed to bring about development that is economically, socially and ecologically sustainable. That is, current consumption cannot be financed by incurring economic debts that others must repay in the future. Investment must be made in the health and education of today's population, so as not to create a social debt for future generations. And natural resources must be used in ways that do not create ecological debts by overexploiting the carrying and productive capacity of the earth.

*Human Development Report 1992*

commitment was the recognition and implementation of the Universal Declaration of Human Rights, first adopted by the UN General Assembly on December 10, 1948.

The basic human rights defined therein - civil, political, economic, social and cultural - remain globally applicable, and serve to guide modern development strategies, on both the international and local levels.

Figure 1.5

**Sustainable Human Development (SHD) is** development that not only generates economic growth, but distributes its benefits equitably; that regenerates the environment rather than destroying it; that empowers people rather than marginalizing them. It gives priority to the poor, enlarging their choices and opportunities, and provides for their participation in decisions affecting them. It is development that is pro-poor, pro-nature, pro-jobs, pro-democracy, and pro-women, among others.

## **Peace, Justice, Freedom and Gender Equity**

The preamble of the Universal Declaration of Human Rights recognizes that all humans - men *and* women - have equal and inalienable rights and an inherent dignity, and that these serve as the foundation for world peace, justice and freedom.

The different concepts of international development which have evolved and have been forwarded by the UN and other international development organizations subsequent to the 1948 Declaration, including Human Development (HD), Sustainable Development (SD), and Sustainable Human Development (SHD) (detailed in Figures 1.3, 1.4 and 1.5) work to uphold and promote these human rights, while defining contemporary means to do so.

The concept of Human Development was first widely presented by the United Nations Development Programme in 1990, in its first annual global Human Development Report. Since that time, the concept of the human development process has been broadened to include the impact of external conditions (like the state of the environment) and the participation of individuals in their own development.

Within that first report, the methodology for achieving a more accurate analysis of nations' development - based not only upon economic but human development indicators - was established. Since that first report, the analytical methodology has been further improved, and now serves as an international standard for quantitatively measuring not only nations' economic development, but their human development. This is done through the statistical analysis of Human Development Indicators (HDIs), which include nations' education levels, standards of living, and levels of human freedom. The widespread acceptance of this annual report acknowledges a change in the mentality of the world community - that economic capacity alone does not ensure a nation's development, and that all nations - from the richest to the poorest - can benefit from the reevaluation of their development.

## **The Evolution of the National Human Development Report**

This National Human Development Report (NHDR) is Moldova's first intensive effort to analyze its human development standing on a national level, using established global standards and methodologies. The statistical data found at the end of the report reflects Moldova's standing based on the standardized human development indicators introduced in the global report.

In 1991, Moldova's year of independence, the global HDR ranked the Republic at 64th place in its survey of 179 countries' human

development. In only three years, as a result of degradation in the nation's economic standing, Moldova's ranking has dropped by 11 points to 75th place - a quantitative demonstration of an already known fact - that Moldova's transition process has devastatingly impacted the Republic's social situation. In light of this reported decline, Moldova's NHDR initiative, from which a SHD strategy has developed, could not be more timely.

In addition to the standardized HDI, additional statistical indicators - specific to Moldova - will be provided throughout this report. These Moldova-specific statistics demonstrate the unique character of the Republic - including its strong scientific and research capacity, its enormous agricultural potential, its history of environmental devastation - and thereby provide insight into Moldova's unique development situation.

In honour of the upcoming UN Fourth World Conference on Women, in accordance with the lessons of equity of the UN World Social Summit, and in recognition of the very real need to achieve a better situation for women in Moldova, this report also attempts to evaluate the specific situation of women in Moldova, and identify a means to incorporate women's development into the nation's overall human development effort.

This national report has evolved over months of intensive and active cooperation from the National Human Development Report Steering Committee, comprised of specialists of Moldova's Academy of Sciences, Academy of Economic Studies, Department of Environmental Protection, as well as Ministries of Economics, Labour, Social Protection and Family, Health, and Education, which led in February 1995 to the First National Conference on Sustainable Human Development. The preparation of this report is considered not an end, but instead a means through which a broader understanding of and commitment to the SHD concept can be achieved throughout Moldova.

This period of transformation has marked a particularly appropriate moment for the development of Moldova's SHD strategy, as the true potential exists for incorporating it into the nation's ongoing reform process. The implementation of this strategy requires an essential change in ideology, but one which will guarantee the country's appropriate pursuit of the human rights first espoused, nearly 50 years ago, in the UN Universal Declaration of Human Rights - peace, justice, freedom and gender equity.





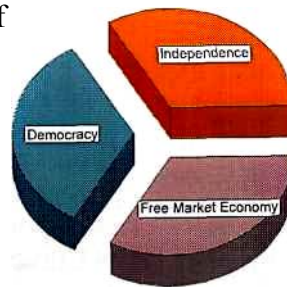
# Independence, Democracy and Market Economy: The Impact of Moldova's Tri-Faceted Transformation

## The Three Faces of Transformation

Moldova's achievement of independence in August 1991 set the stage for the pursuit of social, economic and political reforms. On a human level, these reforms have created an additional and equally significant challenge - of ideological transformation - for many of the changes confronting society are contrary to the lessons taught and learned under Moldova's formerly communist political and social system. The successful transformation of the economic, political and administrative systems of the nation will serve as the foundation upon which the infrastructure of the nation's human development priorities will be balanced.

## To Independence and Democracy

Moldova's acquisition of independence, as described in Figure 2.1, was quickly followed by steps to achieve national as well as international recognition of its autonomy and sovereignty. Internally, these steps included the transition from communism to democracy, the establishment of national governing and administrative bodies, the reform of local governments and administrations, and the restructuring of the country's legal foundations. Activities in this direction have included the election of the independent nation's first president, Mr. Mircea Snegur in December 1991, the holding of democratic parliamentary elections in the spring of 1994, the formulation of a democratically-based national constitution (adopted in August 1994), and ongoing legislative reform in all social, economic and political areas.



The introduction of a stable national currency - the Moldovan lei - on November 29, 1993, replacing the Russian rouble, further served to extricate Moldova from its economic dependence on Moscow, and served as an indication, on the international and local level, of the nation's positive efforts towards achieving economic development, and ultimately, its successful pursuit of autonomy. Efforts to maintain Moldova's sovereignty have been challenged, internally, by independence bids made by ethnic/political factions in the western and southern regions of the country, as described in Box Figure 2.1; nevertheless, the national government of Moldova has continually sought to achieve peaceful resolution to these issues.

In the international arena, Moldova's pursuit of independence and democracy have been supported by the international community, on both the bilateral and multilateral level; the latter through achieving membership in the United Nations (in March 1992), and through the pursuit of membership in other international bodies, including the European Council. Bilateral recognition of Moldova's autonomy, and Moldova's strong agricultural and industrial foundation led to the establishment of non-traditional trading links which again served to reduce Moldova's dependence on the economic centers of the FSU, and to increase its economic autonomy. (Nonetheless, approximately 74% of Moldova's exports and 71% of its imports are still with FSU countries; with almost 50% of this being with the Russian Federation.)

The bilateral and multilateral relationships

Figure 2.1

## Overview of the History of the Republic of Moldova

The Republic of Moldova is situated in the southwestern corner of the Former Soviet Union (FSU), bordering Romania to the west, and Ukraine to the north, east and south. Although during parts of its history, Moldova encompassed sizable parts of Romania and Ukraine, and a small part of Hungary, as they are known today at present its borders are delineated by the watery borders of the Prut and Danube rivers to the west and southwest respectively, and a small piece of land to the east of the Dniestr river. This unique locality, at the perimeter of eastern and western cultures, has contributed to a long and difficult struggle against other countries and to the very difficult task for the indigenous Moldovan people to maintain their cultural and political sovereignty.

During the Middle Ages, as well as in modern times, Moldova, like other principalities, carried out a policy oriented towards the maintenance and recognition of its independence, the defense of its territory, and the preservation of its historical frontiers.

One of the most glorious eras in the history of Moldova occurred during the reign of the government of Ștefan cel Mare (Ștefan the Great) between 1457 and 1504. During these years, Moldovans won brilliant victories over the Turks, Tatars, Hungarians, Poles and other invaders. This temporary success, however, was no guarantee of the nation's future stability.

Under the permanent threat of invasion, the principalities of this region experienced periods when their unification was the only means for them to resist aggression. Thus, in light of historical circumstances, the first unification of three principalities of the region, namely Transylvania, Moldova and Muntenia, took place during the rule of Mihai Viteazul (1593 to 1601). Although short lived, this historical event served as a precedent for the union of the two principalities - Tara Romaneasca and Moldova - which formed a new country in 1859, namely Romania.

The Bassarabian region of Moldova was first annexed to Russia - at that time the Russian Empire - in 1812. Following the Crimean War, in 1856, Russia lost the southern region of Bassarabia to Moldova, only to gain it back from Romania in 1878-at the Congress of Berlin. With the collapse of the Russian Empire in 1918, this region, comprised of part of the present territory of the Republic of Moldova and part of Ukraine, declared its independence and reunited with Romania. The newly formed Union of Soviet Socialist Republics (USSR) refused to recognize this reunification, however, and in 1924 created the Moldavian Autonomous Soviet Socialist Republic (MASSR). In June 1940, according to the Molotov-Ribentrop pact, the remainder of the present-day Bassarabia was annexed by the USSR, and part of it was combined with the MASSR, to form the Moldavian Soviet Socialist Republic (MSSR). In the early 1940s, as the Second World War raged through Europe, Romania again claimed the territory of the MSSR. Following the war, the region was annexed again, for a final time, by the Soviet Union.

Subsequent to the 1944 annexation of the MSSR, the leadership of the USSR, in an attempt to create a uniform, patriotic and Soviet-cultured empire, began a period of intense Russification. This process included the official introduction of the Cyrillic alphabet and the Russian language into everyday life (replacing the traditional Latin alphabet and Romanian language), and the cultural re-education of the population into the Soviet/Communist tradition.

The tone of Soviet leadership changed in 1986 with the introduction of the radical policy of "glasnost" (openness) by USSR President Mikhail Gorbachev. This new policy permitted the pursuit of traditional culture by the Moldovan population and leadership, and set the stage for the Republic's independence. On August 27, 1991, following the former URSS peoples' struggle for independence and after a failed coup in Moscow that resulted in the ousting of Gorbachev from power and the political collapse of the USSR, the Moldovan Parliament and the Republic's General Assembly declared Moldova's independence.

Following Moldova's declaration of independence in 1991, two regions of the republic subsequently declared their own independence, establishing the self-proclaimed Republic of Gagauzia (comprising a region in the south of Moldova dominated by a Turkish-speaking orthodox population) and the self-proclaimed Dniestr Moldovan Republic (DMR) (consisting of the region located on the left bank of the southern-flowing Dniestr river.) Although the independence of the regions was and is not recognized by the Moldovan government or by other nations, the regions continued to seek political recognition, although with different political agenda.

In the unrecognized DMR, after 1991, the political situation gradually escalated into violence, which erupted in March 1992 at the hands of Dniestrian separatist rebels. The violence continued throughout the summer, despite the holding of peace talks by Moldovan, Ukrainian, Russian and Romanian authorities. During this period, the 14th Russian Army entered and extended its influence into the region in what Russia called a peace-keeping gesture. The true objectives of this foreign army presence were and continue to be questioned by the Moldovan government, as well as by representatives of other nations and international organizations; the conditions of its withdrawal are currently being pursued in multilateral meetings.

To this day, the DMR continues to stick to the separatism, launched by Russian extremists who arrived here on the eve of the empire's decay, being supported by Russian imperialist forces. The **Gagauzian** region, in contrast, has reached a compromise with the Chisinau government, resulting in the designation of a special political, although non-autonomous, status for the region. These internal struggles, as well as the nation's tri-faced reform, challenge the Moldovan leadership and people in their pursuit of prosperous and sustainable human development.



Figure 2.2

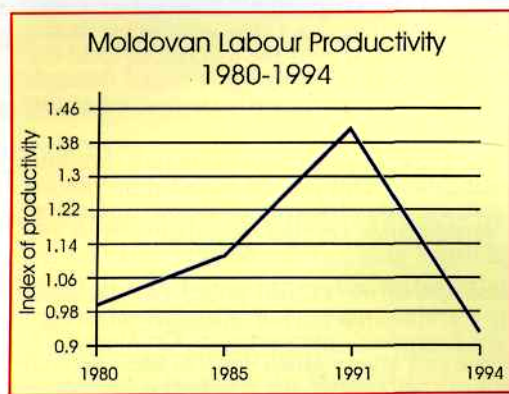
### Priorities of Moldova's Economic Reform

- Increase national industrial capacity by increasing the modernization/efficiency of plants; providing state of the art training to workers; improving industrial management techniques, and promoting planned conversion of high-tech Soviet-era industry - including military industry - into peace-time production facilities.
- Increase national agricultural potential through the adoption and promotion of environmentally sound agricultural techniques; the repair of land and waters damaged through intensive agricultural activity; the improvement of agricultural management and training; the successful privatization of agricultural holdings; and the promotion of modern farming technologies.
- Promote banking reform to ensure a favorable investment and lending climate for national and international investors.
- Pursue tax reform - including the establishment of a national treasury for resource management/monitoring, the formation of budget planning/monitoring/reporting systems, and the creation of more efficient collection systems - as a means to strengthen the national economy.
- Continue to pursue monetary reform activities, including the stabilization of the Moldovan lei - not through the support of international loans, but national economic capacity.
- Finalize the privatization process of personal dwellings, farms and enterprises.
- Diversify international trading partners - in order to reactivate traditional trading links, while at the same time opening new markets.

established by Moldova in the early stages

### To a Free Market Economy

Figure 2.3



of its transformation have promoted not only the diversification of trade links, but the initiation of foreign investment and international technical/financial assistance. Development loans, including those from the World Bank and the IMF, equalling over US\$600 million in the last few years, as well as technical assistance from the United Nations, the European Union, and bilateral agencies, have assisted Moldova in the planning of its national development strategy.

As a component of Moldova's difficult transitions to independence and democracy, the republic is faced with the enormous challenge of economic reform and transition - from a centrally-managed to a free market economy. Statistics from the last three years indicate that the economic challenges facing Moldova are enormous. Moldova's Gross Domestic Product (GDP) is estimated to have dropped by more than 50% in the last three years, and as is discussed in detail below, the social impact of this decline has been significant. Essential steps towards Moldova's goal of economic transition include the promotion of industrial reform, entrepreneurship, privatization, and international trade with traditional as well as non-traditional trading partners. Prerequisites for this success will include, on the industrial level, the improvement of industrial technologies and management (including the quality/efficiency of production) in order to make them more compatible with western standards; and the improvement of legislation dealing with trade, banking and entrepreneurship. The government's priorities in macroeconomic reform are given in

Figure 2.4

## Priority Reform Objectives of the Moldovan Government

1. Establish a stable private sector-oriented financial sector to include banking and capital market development.
2. Establish a stable monetary environment and financial sector regulatory environment.
3. Reform state-owned enterprises to transform them into efficient and profitable companies or dissolve the enterprises.
4. Privatize state-owned enterprises (or parts of state-owned enterprises) and services that are deemed viable commercial enterprises.
5. Establish a legal/regulatory environment to support economic reform and facilitate commercial enterprise start-up and growth.
6. Improve the statistical base for recordkeeping, analysis and decisionmaking.
7. Transition to international accounting principles in public and private sectors.
8. Undertake sectoral restructuring and reform of: industry, agro-industry, energy, transportation and telecommunications.
9. Improve the efficiency and performance of the public administration system.
10. Develop entrepreneurial education and training programmes and facilitative support services.
11. Develop a facilitative free market and legal/regulatory environment (domestically and internationally) for export development and undertake export promotion and training services.
12. Provide the necessary social sector support needs to include: health and social protection net for the unemployed and underemployed.
13. Provide the necessary education reform to provide human resources for a democratic society and market-oriented economy.
14. Improve foreign relations in regards to trade, foreign investment and grant credit assistance.

(Priorities listed as defined by the Government Commission on External Commerce, Foreign Investment, Technical Assistance and Humanitarian Aid)

Figure 2.2. Bilateral and multilateral assistance is being provided in order to assist Moldova in achieving these goals, both through technical assistance as well as through development loans.

On the microeconomic level, reform requires the promotion of free market ideology and, subsequently, entrepreneurial activity - which in turn requires not only the retraining of the population in business practices, but also the surmounting of ideological barriers to free enterprise which were promoted during the communist era. The human component of broad based economic development ~ as with sustainable human development, in general - is significant. Moldova can in this context exchange experiences with neighboring Ukraine, which is undergoing a similar process of transition. According to Ukrainian President Leonid Kuchma<sup>1</sup>, only 35% of the decline in Ukraine's economic production following independence could be attributed to macroeconomic reasons,

such as reduced trade and difficulties in international financial interactions, considering that 65% of the production decline resulted from human factors - including poor management skills, poor technological decisions, and resistance/failure to execute decisions taken to

Figure 2.5

### Positive Components of Communist Social Theory

- Elimination of person to person economic exploitation
- Elimination of poverty in the absolute majority of the population
- Adoption of legal equality for all citizens
- Elimination of gender inequality, through the promotion of equal rights of men and women
- Job guarantees, resulting in a lack of unemployment
- Guarantees of education, health protection and housing
- Social protection for the elderly and the disabled
- Promotion of maternal and child health

*Roshka & Zuvtur Academy of Sciences of Moldova*

Figure 2.6

#### Goals of Moldovan Social Reform

- the protection of incomes;
- the provision of jobs and the counteraction of unemployment;
- the provision of support to the socially vulnerable, including those unable to work;
- the accurate estimation of living standards;
- the accurate indexation of population revenues; and,
- the provision of securities for labour and other activities.

*Ministry of Labour, Social Protection and Family*

promote industrial reform and increased production. Thus, the human factor, on the microeconomic level, must be addressed in order to achieve true economic reform and transition. The decline in Moldova's industrial productivity, as visible in Figure 2.3<sup>2</sup>, indicates that Moldova's economic development faces similar challenges.

According to Mr. Sergiu Chirca of the Academy of Economic Sciences, Moldova's economic transition and the establishment of a free market infrastructure can be achieved only through microeconomic stabilization, which will lead to macroeconomic stabilization, and set the stage for successful economic reform.

### **National Development Priorities: The Balance to Ultimately Achieve SHD**

In the context of Moldova's tri-faceted transformation process, the Moldovan government has defined its ongoing development priorities, as found in Figure 2.4. These priorities, supported by the nation's strong human, industrial, agricultural, scientific capacity, and externally with the support of international donors, lenders, and advisors, including the World Bank/IMF, the United Nations and the European Union, will help lead the nation towards economic reform.

Moldova's Ministry of Labour, Social

Protection and the Family has also defined its strategy of social reform, as noted in Figure 2.6. These reforms recognize that the change from socialism and a centrally-planned economy to democracy and free market economy require a considerable restructuring of the social safety infrastructure. The sound social protection policies of communist times (Figure 2.5) - while mainly declarative<sup>3</sup> - nevertheless were theoretically sound, and should serve as a model of the fundamental social services guaranteed under Moldova's new economic and political system, albeit provided via different means. The steps to establish a legal framework for initiating social reform based on the Ministry's objectives have already been undertaken, and laws on pensions, the disabled, labour resources, remuneration, worker disputes, labour codes, and others have been established by the Parliament of the Republic of Moldova.

In addition to political, economic and social reform, Moldova must seriously pursue environmental reform and development. Moldova's environmental reform priorities are defined in Figure 2.7. Past environmental violations - particularly of the Soviet era, but persisting into the present - threaten the integrity of

Figure 2.7

#### Priorities of Environmental Protection

- the cleaning-up of existing pollution, and the reduction of the negative impact of existing pollution on the health of the population;
- the execution of reform which will have the maximum positive ecological impact at the lowest cost;
- the implementation of activities with positive ecological and socio-economical effects;
- the preservation of biodiversity and the creation of ecological reserves;
- the fulfillment of Moldova's international environmental commitments; and,
- the evaluation of long, medium and short-term environmental priorities.

*Department for Environmental Protection*

Moldova's agricultural lands, forests, water, air, and ultimately the health of the Moldovan people, and the foundation of the nation's economy. Moldova must also pursue an effective means to predict and mitigate cataclysmic environmental and terrestrial events - including natural changes in environmental trends (including the stabilizing phenomena of annual or biannual drought<sup>4</sup>) floods, hurricanes/cyclones, early/late frosts, landslides, and earthquakes -in order to avoid or diminish their effects; assistance in this area will be

provided through a programme on disaster management to be undertaken by the Government of Moldova, in cooperation with UNDP.

Pursued alongside and in collaboration with one another, well managed economic reform and development will augment social reform, and vice versa. These two, in this, together with effective environmental planning and protection, will lead to the achievement of sustainable human development.



## Sustainable Human Development in Moldova: The Past, Present, and Potential Situation

### Sustainable Human Development Potential

The process of defining a sustainable human development strategy for any nation requires, as a first essential step, an open assessment of its current level of human development. Through the study of Moldova's demographic situation, its overall standard of living, and, in general, its social, environmental, and economic trends, the justification for Moldova's global human development ranking can be assessed. The means of globally ranking Moldova is described in the table below, using 1992 statistical data. The further decline of Moldova's global ranking since 1992 - from 0.714 ranking to 0.75 ranking - is reflective primarily of the nation's declining life expectancy, as well as the drop in the GDF during this period of transition.

The following overview, which also includes an assessment of the nation's development resources - human, economic, and environmental - lays

the foundation for the development of a national SHD strategy.

### Demographic Trends: An Insight into Human Development

The impact of Moldova's independence and transformation process has been vividly reflected in the republic's demographics, and serves as a strong indication of the nation's need for economic and social reform.

### Births & Mortality

As of its most recent census (1990), Moldova's population was registered officially at 4,362,000, making Moldova, despite its significant agricultural orientation, the most densely populated nation of the former Soviet Union. Since its acquisition of independence, however, Moldova has faced a declining population growth rate. This is attributable to a number of factors:

Figure 3.1

Index Ranking of Nations in 1992	Life Expectancy at Birth	Adult Literacy Level (%)	Years of Education	Average Human Development Index
High Index (53 countries) Medium	74.10	97.30	9.80	0.886
Index Countries (64 Countries) Low	68.00	80.40	4.80	0.649
Index Countries (54 Countries)	55.80	47.40	2.00	0.355
Republic of Moldova	69.00	96.00	6.00	0.714



### *Declining Birth Rate*

Due significantly to economic difficulties and lack of social and medical services, which make the prospect of having a child daunting, families are choosing to limit or postpone the birth of children. This tendency is reflected in Moldova's special birth rate - that is, births to parents between 15 and 49 years of age ~ which dropped by 33% between 1989 and 1991. Due to the public's limited familiarity with and access to effective family planning services/methods, abortion serves as a common means of family planning in Moldova, particularly so during this transition period. Moldova's abortion rate - 110 abortions per 100 live births - is the second highest rate in the FSU (second only to Russia), and the highest rate as compared to those in Europe. It is estimated that 78% of Moldovan women under the age of 25 have had two or more abortions<sup>1</sup>. The difficulties in Moldova's medical system have further jeopardized this means of family planning; 12.5% of maternal mortality results from botched abortions or post-abortion infection. The latter also results in high rates of sterility, which could further impact Moldova's birth demographics in years to come.

### *Rising Death Rate*

Compounding its declining birth rate, Moldova has experienced an increase in mortality during its period of transition. This increase is not due to an increasing mortality of the elderly, as one might expect, given Moldova's significantly aging population (addressed below), but instead is attributable to other factors, including increases in maternal, child and infant mortality; increases in murder and suicide; decreases in labour security regulations; increases in alcohol related illness and mortality; and an overall reduced capacity of the medical system, as a consequence of insufficient funding, resulting in the death of able-bodied persons from illness and injury which, in a more adequately supplied medical system, would not normally be fatal. Men have been affected

most significantly by this trend, as is reflected in their declining life expectancy - which currently equals 65 years.

### **Ageing Population**

The overall age of Moldova's population is increasing steadily; as of 1992, 13.1% of the population was over 60 years of age. This trend is influenced by the declining birth rates in the republic, but is mostly attributable to the mass immigration of FSU citizens into Moldova which took place in the 1950s and 1960s. This demographic trend has resulted in a particularly stressful situation for Moldova's social security system, which, already struggling with high unemployment and a growing vulnerable population, is also challenged with the need to provide support to the nation's aged and retired sector. The trend has also placed economic stress on families which work to provide support to their aged dependents.

### **Increasing Migration**

Ethnic migration has primarily been composed of ethnic Jewish, German, Russian and Ukrainian individuals seeking to return to their homelands.

Occupational migration, in contrast, has resulted from the nation's economic and unemployment crisis. Internally, urban to rural migration trends have been recorded, as workers and families move from the cities, where job vacancies are saturated, to the country, where, at the very minimum, subsistence farming allows families to support themselves through the economic crisis. In 1995, indicative of this trend, rural populations have increased by approximately 27 thousand and urban populations have decreased by 41 thousand, in comparison with 1991 figures.

Unemployed and underpaid workers have also resorted to temporary emigration, moving to foreign nations primarily Russia - in search of higher-paying jobs; unfortunately, many of these jobs carry great occupational risks, due to difficult

industrial conditions or harsh climates (e.g. oil drilling in Siberia, timber cutting, industrial construction, etc.), and have resulted in increased mortality rates among men of working age. Emigration has also been experienced extensively amongst the nation's scientific population; this phenomena, known as "brain drain" (to be described in more detail below), undermines the nation's present and future scientific, and therefore economic social potential for development.

### **Racial/ethnic statistics**

Moldova is populated by different ethnicities, including Moldovans (64%), Ukrainians (13.8%), Russians (13.5%), Gagauzians (3.5%), and a small number of Turks, Jews and Bulgarians. The diversity of the nation's ethnicities, and the historical influences of these ethnic groups, have resulted in two disparate cultural heritages - Latin/Roman and Slavic. The majority of Moldova's present economic potential - its strong industrial and agricultural sectors - are attributable to the influences and developments of the USSR (Slavic) era; the nation's ethnic and cultural foundation, meanwhile, can be attributed to its Latin/Roman origins<sup>2</sup>. According to Mr. Sergiu Chirca of the Academy of Economic Sciences - if these two disparate cultures are not integrated, they will serve "a fertile soil for separatism". Such separatism has already been experienced in the Transnistrian and Gagauz regions of Moldova, which, as noted above, have sought their independence from Moldova.

### **Overall Standard of Living**

Moldova's standard of living has faced significant decline since independence. In 1993, more than 50% of the population could not afford a minimum basket of *goods*; at the end of 1994, this trend continued. While the minimum monthly wage/pension equalled 18 lei(US\$4.1) per month and the average monthly wage equalled 108.6 lei (US\$24) per month, the minimum consumption budget was calculated at 271 lei (US\$61) per month.

These deficiencies in resources were exacerbated by the complete price liberalizations made in June 1994 of previously subsidized foods (bread and dairy products, in particular). One tangible result of this decline in purchasing power is visible in the decline, on a national level, of the population's overall food consumption (Figure 3.2).

Economic difficulties, have influenced not only the people's capacity to purchase food and material goods, but also for the nation to fund health care, education, and social services. Considering the strong social services system of the Soviet era, one danger of social decline in its development, on the part of the population, is the growth of nostalgia for the pre-independence era. While Moldova's independence holds the promise of political, economic and social reform, the realities of the transition period, on the individual level, are difficult to surmount. At present, only 7% to 8% of the population consider their welfare to be better than the pre-independence era<sup>4</sup>.

In general, reform which will reflect positively upon the national standard of living, and will bring people above the poverty level will require an increase in annual budgetary allocations in the fields of health care, education/professional training, and social security, as well as in the fields of science, research and development, and environmental protection. Of course, such reform cannot take place without the nation's economic development which will, in turn, create the economic basis for such developmental investments.

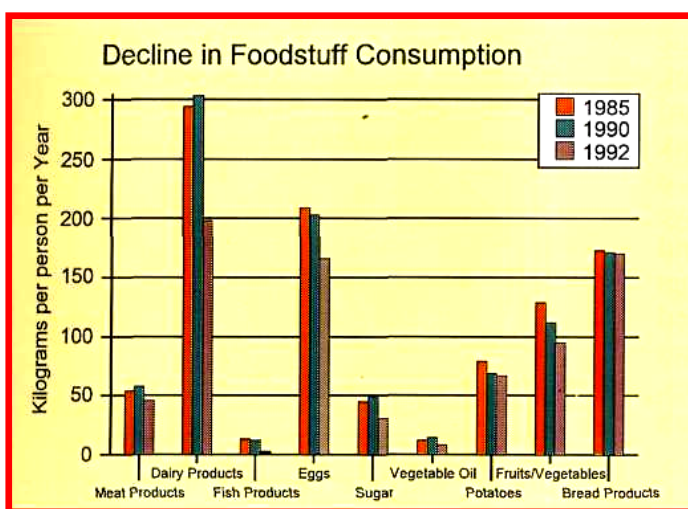
### **Strong National Potential**

Moldova has the potential to achieve economic and social recovery, and therefore pursue a sound sustainable human development strategy. This potential lies in the nation's resources - human, material, and economic.



### Human/Intellectual Potential

The Soviet era instilled a strong and sustainable potential in Moldova in the form of a highly literate population (96%), a highly trained and technically skilled workforce, and a strong scientific and intellectual resource pool. The reorientation of these human resources towards the rebuilding of Moldova's economic and social infrastructure, will serve as one of the fundamental building blocks to achieving sustainable human development.



### Natural Resources

Moldova's chief natural resource is its highly fertile agricultural lands, and the agricultural products which grow thereon - including fruits, vegetables, grains and other foodstuffs; and vegetal matter used in the synthesis of pharmaceuticals, perfumes and other organic materials. In particular, the production of quality wines - which have won 30 international medals in recent years, including at Miculov, Bratislava, Varna, Izmir, Timisoara and Bordeaux contests - serves as one of Moldova's strongest export potentials. New discoveries of metallic elements (silver, copper, zinc, and manganese) in the south of Moldova, and oil deposits in southwestern Moldova (in Valeni) and gas (in Victorovca), also

contribute to Moldova's natural resource potential. Moldova's geographical location, its meteorological conditions, and its agricultural basis also create the appropriate environment for the collection of solar, wind, and biogas as renewable energy resources.

### Economic Resources

Moldova has a diversified economic potential. In addition to its agricultural resources, mentioned above, Moldova maintains a strong industrial infrastructure, specializing in mechanical engineering, and particularly in the production of electric motors, pumps, tractors, agricultural technology, refrigeration devices, and washing machines; textiles and clothing; and construction materials. Scientific expertise - particularly in the fields of mathematics, physics, electronics, electrochemistry, biotechnology, seismology and energetics - strongly subsidized during the Soviet era, remains, during independence, as another of Moldova's sustainable strengths. These industrial and scientific resources serve Moldova not only in their traditional areas of expertise. They are also indicative of the intellectual and material potential Moldova maintains for the highly technical diversification of its present industrial and scientific capacity. The infrastructure supporting Moldova's industrial and scientific activities include 418 factories with 207,000 staff (as of 1993); technical training institutes, and specialists trained therein (including 9,044 graduates from universities and 11,375 from technical schools in 1993; an Academy of Sciences, with 25 institutions, 4,839 collaborators as of 1995, and 84 branch institutions with 10,046 experts working as of 1993.



# The Path for Sustainable Human Development: The Civil, Political, Social and Environmental Potential of Moldova

## Strategies and Potential for the Achievement of SHD

When judging the success of any country's transition - including the Republic of Moldova's - economic transformation is most easily assessed. Tangible quantitative indicators - gross domestic product, per capita income, etc. - determined by internationally accepted statistical methodologies, provide an accurate assessment of a country's economic capacity. Sustainable Human Development, on a broader scale, is less straightforward in its capacity for quantitative assessment. As noted in Chapter One, UNDP has established the means for such quantitative assessment, through the collection and analysis of human development indicators (HDIs); this data (Chapter Six), as collected by the Moldovan Department of Statistics and appropriate Ministerial bodies, provides a first glimpse into Moldova's human development.

Below, through the analysis of Moldova's success in the realization of human rights for its citizenry, the successes and requirements of the republic's further sustainable human development strategy will be defined.

## Freedom from Discrimination

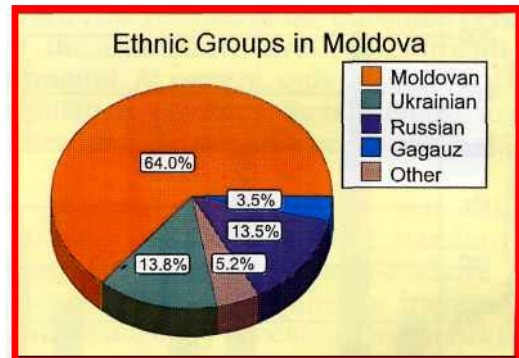
During the Soviet era, freedom from discrimination, although a declared right, was not one which was truthfully pursued within the borders of the Soviet Union. The most significant violations of this freedom - particularly ethnic and gender rights violations - have been acknowledged by the Government of Moldova since the acquisition of independence, and

significant steps toward the rectification of past injustices have been undertaken. Only through continued attention to these injustices will true equality of opportunity be achieved.

## Ethnic Tolerance

Moldova's history, as described in Chapter Three, has been that of a crossroad of different nationalities; the constant political

Figure 4.1



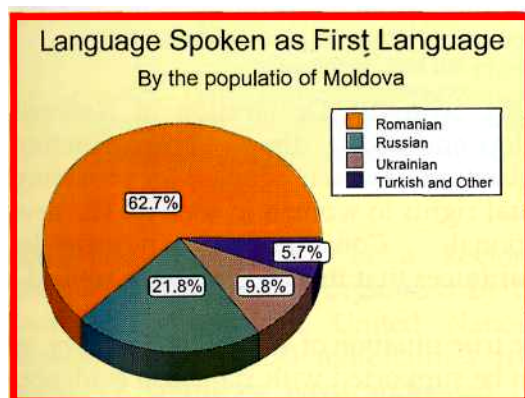
tug of war for control of the country's territory and people has, to a large extent, contributed to the nation's present ethnic diversity, as visible in Figure 4.1. (A large segment of the Russians and Ukrainians of the population were established in Moldova through forced and incentive-induced migration during the Soviet era, particularly in the 1950s and 1960s.) To a certain extent, it has also, unfortunately, contributed to the development of territorial and ethnic conflict.

The subtle segregation of ethnic groups, particularly through Soviet denationalization policies in the second half of the 20th Century, created disparities of opportunity which planted the seeds of ethnic disharmony in the republic. The

Soviet policy of favoring non-indigenous ethnic groups - particularly ethnic-Russians - throughout the republics of the Soviet empire, harshly impacted Moldova. The indigenous Moldovan population was forced to undergo a process of russification, and thus, on an official level, abandon its cultural sovereignty to that proclaimed by the Soviet empire. The language of the indigenous Moldovan people - Romanian - was designated secondary to Russian.

The intellectual disadvantage forced upon the indigenous Romanian speaking population, through the legalization of Russian as the national language, set the stage for further inequalities of ethnic opportunities. Trends in education show

Figure 4.2



that while Russia's influence substantially increased the number of schools and the intensity of educational programmes within the nation (resulting, for example, in a literacy rate of 96%), ethnic Moldovans received far fewer educational opportunities than their Russian and Ukrainian counterparts. According to Dr. Nicolae Movileanu, a historian of the Academy of Sciences, "the network of educational institutions was created by the Soviet regime to serve the Russian population living in and emigrating to Moldova. The use of Russian as the functional language for inter-ethnic contact, and practically as the official state language, resulted in a considerable decrease in the number of Romanian-

speaking schools..." Differences not only in the languages, but the curricular content of the lingually/ethnically-segregated schools, resulted in the disparity of education by ethnicity.

Inequalities in education resulted in further inequalities, particularly in the workplace. Jobs of higher status and salary, conferred largely to ethnic-Russians, in accordance with Moscow's centralized leadership plan, were made even more inaccessible to ethnic-Moldovans due to these educational disparities. Thus, gaps between the republic's ethnic groups resulted in a new ethnically-based class structure, with the nation's indigenous majority at the bottom.

With the promotion of the "glasnost" campaign by USSR President Mihael Gorbachov in the mid-1980s, and subsequent to that, with the acquisition of independence and sovereignty in 1991, ethnic Moldovans have had the opportunity to exhume their culture and language, and to seek equality for all of its ethnic groups. Educational reforms, including retraining programmes for the educationally-disadvantaged, and the conversion of many schools curriculum into the state language (Romanian) have served to facilitate this equalization.

***Ethno-Regional Tensions.*** Large scale ethnic migration is also reflective, for some, of concern over the potential reversal of ethnic inequalities and the escalation of Moldovan nationalism. The pursuit of autonomy on the part of the Gagauz (Christian Turks) and Transnistrian people (as discussed in Chapter 3) has also been partially attributed to this fear. The Moldovan government is nevertheless committed to the resolution of ethno-regional conflicts, and is dedicated to achieving the prevention of unfair exploitation of, and discrimination against, national minorities.

***A New State Language.*** Legislation calling for the change in Moldova's state

language -- from Russian to Romanian — was initially met with little opposition. Delays in initiating the language change aggravated socio-political tensions, however, and opposition to the language transition increased amongst the nation's ethnic minorities. New legislation was created, in order to facilitate and expedite the language transition, while assuring the rights of national minorities. Its implementation, however, was confronted by socio-political and administrative difficulties, including the lack of financial resources and mechanisms for efficiently implementing the change.

The language change has, on the positive side, resulted in cultural empowerment for ethnic Moldovans; on the negative side, for non-Romanian speakers, it has led to frustration -- over the challenging task of language learning, prejudices based on language abilities; and a sense of cultural deprivation. The transition of language should be supported, on the individual level, through the promotion of ongoing formal and informal language training, to prevent the alienation of language learners, and to relieve the anxiety that such a radical change affords.

***Achievement of Ethnic Tolerance.*** It is obvious that the Government and people of Moldova accept the peaceful incorporation of ethnic minorities into the new republic. Overall, the Government the Republic of Moldova has sought to ensure the fair integration of the nation's ethnically diverse population, and has established special national bodies for this purpose, including the special Department for National Relations, which maintains specialized subdivisions reflecting the interests of all major ethnic groups (including ethnic Moldovans, Russians, Ukrainians, Gagauz, Bulgarians and Jews) living in Moldova. In the framework of the Academy of Sciences the Institute for National Minorities of the Academy of Sciences has been founded. Along with it the Parliamentary Commission for Human Rights and

National Minorities has been created. The Government has also adopted a number of decisions for promoting national minorities' cultural development.

***Gender in Development.*** The achievement of gender equality, like ethnic equality, is a significant multifaceted challenge facing Moldova. But it is a challenge which Moldova, as its actions in this year of the Fourth World Conference on Women attest, is taking with dedication.

***Foundation of Women's Rights in Moldova.*** In the Soviet era, women were declared equal with men under the law, having equal workplaces, including jobs in leadership bodies. Women were also declared equal and having free access to education, from the primary to the tertiary level.

Along with the Declaration of National Independence, the corresponding legislation has been adopted for providing equal rights to women in society. The new national Constitution, meanwhile, guarantees that this legislation be upheld.

The true situation of women in Moldova, as can be supported with statistical evidence, is far from this constitutionally claimed equality. This situation, unfortunately, is not unique to Moldova; it is a global problem, faced by women from developing countries.

In an effort to promote the achievement of gender equality, the Republic of Moldova has participated actively in global activities, strongly addressing some of the most critical issues confronting women today -- including in the International Conference on Population and Development (September 1994) and the World Summit for Social Development (March 1995) - and has actively participated in regional preparations for the Fourth World Conference on Women, to be held in August 1995. The latter activities have



Figure 4.3

### Challenges of the Women in Development Project of the Government of the Republic of Moldova and UNDP

#### Change Attitudes Towards Women's Issues on the Policymaking and Grassroots Level

- Establish an advocacy infrastructure for women, through the establishment of a Women in Development Unit within Ministry of Labour, Social Protection and Family an Advocacy Group to promote women's interests within the Government, and an ombudsperson specifically dedicated to communicating the needs of women to the government.
- Improve legislation regarding women, and the mechanism for its implementation, through the review of existing legislation, the identification of areas requiring reform/improvement, and the communication of recommendations to the Parliament.
- Increase awareness of policy makers and officials of gender issues, through the holding of a Regional Conference on Women (May 18-19, 1995), the provision of technical assistance to the Department of Statistics on gender specific data collection methodologies, the holding of gender sensitivity workshops with public officials, and the publication of informational bulletins.
- Increase public awareness of women's issues in Moldova, through the provision of training for teachers and students in gender development, the establishment of formalized women's studies programmes in the University, the promotion of gender development issues through the local mass media, and the publication of information bulletins.

#### Assist Individuals in the Promotion/ Achievement of an Improved Situation of Women

- Increase participation of women in business, through the training of women in entrepreneurship and small business management, and the promotion of the establishment of a pilot women's enterprise.
- Establish a Center for the Support of Women, which would provide ombudsperson -type support to women requiring legal assistance, as well as provide legal and psychological support services to women who are the victims of physical and sexual abuse.

comprised the hosting of a Regional Conference on Women organized by the local NGOs and the United Nations. Representatives of 30 nationalities from about 17 countries have addressed the socio-political and economic situation of women, as well as the common platform of actions for the Fourth World Conference on Women.

In addition to participation in international activities, local level activities supported by local women's NGOs and development assistance, including the UNDP funded project on Women in Development (the objectives of which are defined in Figure 4.3), are working to improve the status of women in society.

**Women, Work and Careers.** Statistics show that in Moldova, an average woman's work week is 44% longer for women than it is for men. That is to say, women put in 73.5 hours per week

(38.5 hours in the workplace and 35 in the home) to men's 51 hours (40 in the workplace and 11 in the home). Yet women receive, on average, 20% to 30% less remuneration for their work. Even if one disregards work at home (unremunerated work), women's 38.5 hours in the work place versus men's 40 (a 3.75% difference) fail to merit a 20% to 30% difference in remuneration.

The magnitude of women's work is generally overlooked because unpaid labour -- housekeeping, gardening, etc. - while time consuming and labour intensive, is not officially or commonly recognized as labour. Considered "women's work", the true value of the work generally goes unrecognized.

The labour invested into the task of child-rearing, essential for the healthy development of people, and therefore, of the nation, is often disregarded as work,

Figure 4.4



able to equally share the load of house keeping. While certainly the role of men in the home has begun to change, the equal sharing of duties has not yet been achieved. This inequality is largely the result of persistent social beliefs about the roles of women and men. Until women achieve equality in all other aspects of life — education, wage, leadership roles, etc. -- and achieve an appreciation for their equal intellectual capacity, it is unlikely that society will recognize that women, as equals, deserve equal rights in the family, as well as in society.

although it daily requires hours of careful commitment and planning to undertake successfully.

Worldwide statistical data show that women perform the majority of domestic labour in a traditional family. This situation was not financially inequitable when women's sole work responsibility was within the home, and men's was in the salaried workforce. But, as this traditional social trend began to change, and women began to enter the salaried workforce, their domestic burden failed to equilibrate. Instead, external duties increased, while those in the home remained unshared.

In Moldova, the advent of women into the remunerated industrial workforce began following World War II becoming a mass phenomenon. As of 1945, women equalled 35% of the productive workforce; in 1965 they were 48%, and by 1970, they equalled 51% -- the majority — of this workforce. Today, women in Moldova are responsible for a significant percentage of the nation's Gross National Product (GNP), an indication of their equal contribution to the national economy. And 90% of women of peak working age (25 to 44 years) participate in remunerated work. Yet, throughout that time, women were never

*Women as Leaders.* A shocking statistic demonstrates the attitude of Moldovan society towards women: in a poll of women and men, 80% of those questioned stated that they would not want to work under the authority of a woman<sup>1</sup>. The underlying conclusions of this statistic are profound, indicating a lack of respect for women as authority figures, and therefore a lack of faith in women's capacity to have the characteristics of a leader. That women as well as men hold this point of view demonstrates that social attitudes have played a significant role in undermining, on a national level, women's self-esteem and self-confidence. If social attitudes are ever to change towards women, women must be the first to recognize their capacity for equality. Such a statistic as that noted above implies that the achievement of such recognition will require a significant amount of work.

This lack of respect for women's authority might seem surprising when viewing statistics on the role of women during the communist era. During that time, only four years ago, the equality of men and women was well espoused, and quotas for women in leadership positions ensured a somewhat balanced gender ratio in positions of power. On closer examination, however,

the superficiality of this quality of power becomes evident.

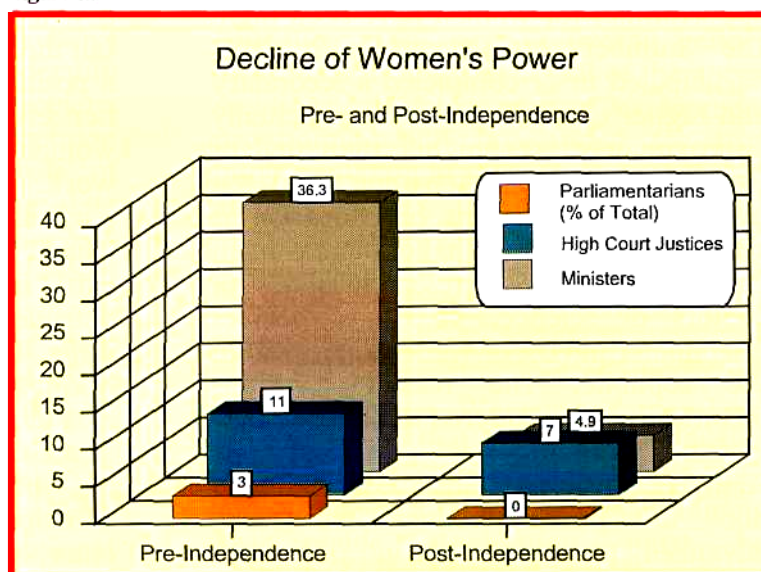
The most telling statistics, indicating the true role of women in society, is that which reveals the major decline in women's authority subsequent to the acquisition of independence.

During Communist times, women held 36.3% of the seats in the Moldovan Supreme Soviet -- the equivalent to today's Parliament. Following independence, that number was dramatically reduced, so that now, women hold only 4.9% of the seats in the Parliament -- an 87% decrease — despite their 52% majority in the general population. Other figures are just as telling: Ministerial positions dropped from three to zero and Supreme Court positions from eleven to seven. Women now hold only 7% of positions as government department heads, 0% of the positions as heads of banks, and 0% of ambassadorships. Without quotas, women have been unable to achieve and hold positions of power.

If women are not considered capable of leadership, then where are they most commonly employed? Presently, they hold the majority of positions in trade and supply work (70%), industrial production (66.2%), health and social protection (79.6%), education (76.6%), and financial services and credit (75%). Notably, however, despite the recognition of women's capacity in these areas, they nevertheless do not generally rise to directorship levels, even in these fields.

Women are also well represented in the field of production and, as noted above, are responsible for a significant percentage of the annual GNP. In these fields, however, they generally fill the less technically skilled, and therefore lower paying jobs. In agriculture, women make up 90% of the unskilled or low-skilled labor force, and in

Figure 4.5



industry, 60%.

*Unemployment.* Due to the severe economic challenges facing Moldova in this time of transition, the level of unemployment has reached an official level of approximately 20,000 (1%) and an unofficial level of approximately 260,000 (13%). This unofficial estimate results from the fact that official unemployment is augmented by "hidden" unemployment — workers required to take forced unpaid leave or work less than full time work weeks. Due to women's lack of technical skills (women make up only 33% of the technically educated) they are the most likely to be laid off. As a result, women make up 60.7% of the nation's unemployed.

*Women's Access to Education.* Certainly one of the most contributing factors to women's success (or lack thereof) in the workforce, as well as in society, is their level of education. On a global level, there is an extreme inequality between the education of women and men. Women are commonly denied access to even the most basic primary education, let alone secondary and tertiary, and the majority of the world's illiterate are women.



In Moldova, in contrast, educational opportunities for women have been high. The number of women who have participated in or completed a secondary and higher educational degree is actually approximately 20% higher than that of men. Nevertheless, participation of women in the upper echelons of education is generally far less than that of men: women make up only 38.7% of researchers, 30% of doctors of science, 16.3% of doctors "Habilitat", and 0% of academicians within the republic. The reason for this incongruity is considered to be twofold.

Firstly, according to statistics, women tend not to pursue educational self-advancement; women, in contrast to men, spend 250% less of their free time working to increase their intellectual and technical knowledge. This is likely attributable to the fact that women spend 300% more of their "free time" working in the home.

Secondly, the age at which women generally become active child bearers conflicts with the traditional age at which students pursue a higher education. Currently, 40.3% of all births occur to women of ages 20 to 24, and 22.6% occur to women of ages 25 to 29. And studies of female students with children have shown that the obligations of motherhood generally overwhelm the obligations of study: of female students with one, two and three children respectively, only 13%, 9% and 0% were able to complete their educations.

Time dedicated to motherhood also serves as a force which undermines women seeking professional careers. When leaving university, both men and women are considered to have equal opportunities for advancement, and indeed are generally placed in positions of comparable authority and responsibility. The divergence of professional careers normally begins as women enter into motherhood.

Due to very favorable laws, providing for 70 days of fully-paid maternity leave, 1.5

years of partially-paid post-natal leave and 3 years of unpaid leave for child rearing (all theoretically guaranteeing the mother a position in her former workplace upon her eventual return to the workforce), women can take almost 5 years off from work. While beneficial to the child, particularly when early childhood education programmes currently do not exist in Moldova, the break can be detrimental to the woman's career, as job skills become obsolete or unfamiliar. Additionally, due to the current economic situation in the nation, it is sometimes not possible for the woman to reenter into her old job, due to the lack of available workspace, or the shut-down of the enterprise. And thus, she becomes another member of the unemployed.

Notably, and laudably for the national law, post natal and child-rearing benefits are also available to a child's father or grandparent, instead of solely to the mother; due to social pressures/beliefs, however, including that a man cannot care for a child as well as a woman, this latter option is rarely taken.

Nevertheless, due to the difficult economic conditions in the country, Moldovan women can rarely afford to take the partially paid or unpaid leave provided for them by law. As this is the case, the question as to why the level of the professional careers of men and women diverge so dramatically, remains.

This situation of diverging career levels based on gender, and the tendency of men to advance further up the career ladder than women, is not unique to Moldova. Even in highly developed countries, in which many professional women postpone or abandon childbearing in order to further their careers, this indifference to women's advancement is evident. It is attributed to a "glass ceiling" -- an invisible yet unsurpassable barrier, created by legislative as well as social attitudes which, although not necessarily obvious, can nevertheless be inhibitive.

In Moldova today, in spite of the existence of legislation guaranteeing women's opportunities to advance in leadership bodies, to fully perform in the society, women encounter the current opinion denying women the multiple role of housewife, mother, leader in the state administration and economic units.

***Violence Against Women.*** The issue of violence against women is not well documented in Moldovan statistics. Yet it nevertheless exists. Based on the examples of other nations, and in conditions of economic hardship and struggle, it is safe to say that physical assault and sexual assault/rape; as well as verbal, emotional and psychological abuse is widespread, and increasing in accordance with the decline in the standard of living and the increasing difficulty of daily life.

Generally, such forms of abuse are considered to be the means of the unempowered or the weakened to lash out against the vulnerability of another, in an attempt to raise the attacker's sense of power. As the people of Moldova struggle against hardship over which they have no control, the perfect conditions for such criminal activity increases. Also, the increasing rate of drug and alcohol abuse throughout the nation is another indicator of the hidden abuse of women that has inevitably followed.

It is necessary for the republic to recognize the problem of the abuse of women, and to implement appropriate strategies to 1) decrease the rate of attacks and 2) provide support to victims.

With regards to the first point, it is evident that such a strategy must be implemented widely on a community level, and backstopped by supporting legislation. Firstly, the public must be educated regarding the truth of abuse and attack; it is best to initiate this education amongst young people, in schools, to allow the education to be deeply ingrained and

carried throughout their lives. Such education, as a part of overall gender awareness training, is a goal of the above mentioned Women in Development programme, and is planned for trial implementation in Chisinau schools in the autumn of 1995.

Nevertheless, in the absence of prior education, overall social education is necessary. Too many people, women and men, fail to question and challenge the abuse of women. Women and men both must be taught that abuse — be it verbal, sexual or physical -- within a relationship and outside of a relationship is absolutely unacceptable. Legislation must be established to support teaching, in order to 1) stop potential attack, 2) punish those who do attack, and 3) provide a sense of safety and opportunity for rehabilitation for the victim. With regards to the third point, it is essential that programmes for raped and battered women be initiated, in order to give abused and assaulted women a safe place to turn. Through the establishment of a proposed ombudsperson-type Center for Women in Crisis, either through the UNDP Women in Development project (which has formulated such a proposal) or through an alternative initiative, the beginning of a system of such support should be provided. International organizations working on the rights of women can be contacted for information on designing and implementing such programmes, including rape crisis hotlines, shelters for battered women and families, and ideas for effective public education.

***Women's Health and Reproduction.*** The declining state of women's health and reproduction in Moldova is an increasingly serious issue. Women in Moldova currently have the shortest life expectancy of *all* European women, at 71.9 years. Moldovan women average 2.5 abortions in their lifetime; and 20% of maternal deaths are caused by abortion-related complications.

Figure 4.6

### Resolution of Moldova's First National Family Planning Conference: A Model for Other Fields of Health Care Reform

In the conference, it was unanimously established that family planning is a many-sided activity, the aim of which is to help families and single persons to reach definite conclusions in the prevention of undesired pregnancy, in the choice of child birth, in the regulation of the inter-partum intervals, and in the number of children in the family.

However, in recent years, the problems of family planning were considered only from the medical point of view.

The peculiarity of Moldova's present situation is an increase in the number of abortions, a decrease of the birth rate and the marriage rate, and an increase in the rate of divorce.

The main reasons for wide-spread abortions is the predominant use of low-effective, traditional methods of contraception and the negative attitude of people and physicians to these methods; the absence of a good system of sexual education, especially of teenagers and adolescents; the inefficiency of information; and an insufficient assortment and supply of contraceptives.

A special problem for Public Health Institutions is abortion and teenage pregnancy.

The modern system of sexual education and other responsible institutions have not promoted an increase in the level of knowledge of sexual behavior and reproduction for the next generation.

The society in general, culture and religion, must guarantee concrete, delicate and correct sexual education. The increase of the level of normal relations between men and women is the only way to control the birth rate.

From the above, and in the context of recommendations of the International Conference on Population and Development in Cairo (1994), and the Investigation of Women's Health of Vienna (1994) the present Conference considers it necessary to create the State Service for Family Planning.

It is impossible to solve this very important problem only through medical institutions. It is necessary to integrate the efforts of medical workers; of all schools; institutions of culture, social care, labor, and justice; youth organizations; the mass media; and representatives of church and local administrative organs. The development of new laws and recommendations on family planning and their correlation with international laws has become necessary. In this connection, it is time to adopt laws which reflect a Governmental policy on family planning proceeding from the principle that every person has the right for healthy reproduction.

This right must be realized on the Governmental level by means of providing multi-faceted assistance to the population in all aspects of family planning, by means of information, medical assistance and consultations about contraceptives, and by the formation of and understanding of sexuality and reproduction from the early ages

The conference considered necessary:

- creation of legal conditions for governmental and non-governmental organizations on the issue of family planning;
- provision for the establishment of family planning centers, with the necessary equipment and contraceptives;
- regulations on the interruption of pregnancy, surgical sterilization and artificial insemination as methods of family planning;
- provision for special medical assistance in the case of infertility;
- provision of medico-genetic consultations;
- utilization of methods of diagnosis and treatment of reproductive function disturbances; and,
- prophylaxis of sexually transmitted diseases.

It is obvious from the above statistics that major health care reform is required to assist the nation in its withdrawal from the current health care crisis. With regards to women's health care issues, particularly maternal and reproductive health, a variety of activities have been initiated by the Ministry of Health, in coordination with *international* organizations, including the United Nations Population Fund (UNFPA), the World Health Organization (WHO), and the United Nations Children's Fund (UNICEF), as well as with the International Planned Parenthood Federation (IPPF).

**Reproductive Health.** Moldova's participation in the International Conference on Population and Development (ICPD), the subsequent assistance it received from UNFPA and IPPF -- including donations of contraceptives, assistance in the planning of the First National Family Planning Conference, and two family planning trainings for regional health practitioners — have worked towards the promotion of women's health initiatives.

In Moldova's First National Family Planning Conference, the Moldovan Ministry of Health effected a very strong beginning to a long struggle to educate women and men about reproductive health, in order to reduce maternal and infant mortality rates, and abortion complications, in order to promote better health and therefore better futures for women. The resolution of the conference (Figure 4.6), is a strong beginning, and one which can and should be emulated by other sectors of society requiring change for advancement.

**SHD and Women's Development.** The above resolution of the First National Family Planning Conference is a proposal of enormous potential, and a particularly effective example of a community initiated Sustainable Human Development initiative. Through its call for a coordinated and multilateral approach to the resolution of the problem of women and men's

reproductive health — seeking assistance from government and community leaders, acknowledging the complexity of the issues, and identifying a step by step approach to success -- the resolution gives credit to the Moldovan community in its ability to achieve a resolution to the problem.

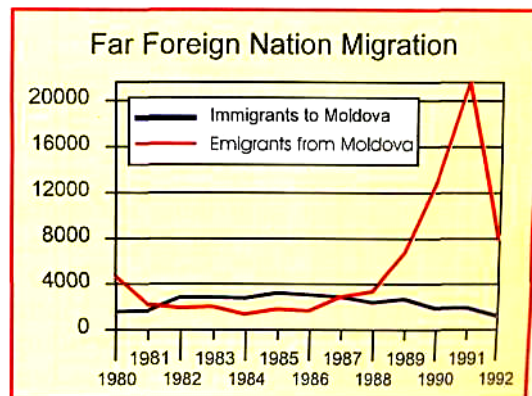
## Freedom of Movement

### *International and Inter-Republican Migration*

During the Soviet era, freedom of movement was limited chiefly to migration to other Soviet Republics, undertaken largely for employment, housing incentives, and educational opportunities. Some migration consisted of forced migration, in an attempt to homogenize the Soviet region, and thereby undermine the potential for nationalistic uprisings. "Far nation" emigration -- emigration to non-Soviet states -- was highly limited; generally, only non-Soviet ethnic groups (Germans, Jews, Bulgarians) were legally permitted to emigrate to their homelands. Defection - illegal emigration -- of Soviet citizens also occurred during the Soviet era, particularly during the international travels of citizens on business or holiday.

The trend of immigration and emigration changed significantly just prior and subsequent to Moldova's acquisition of independence. They are visible in Figures 4.7 and 4.8.

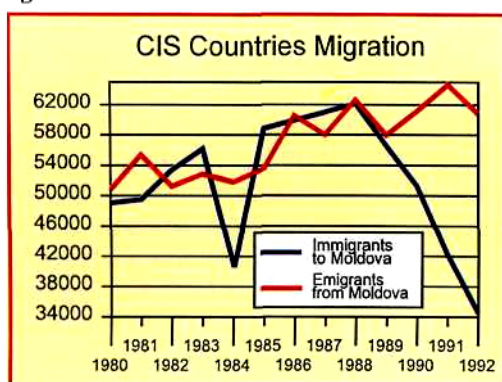
Figure 4.7





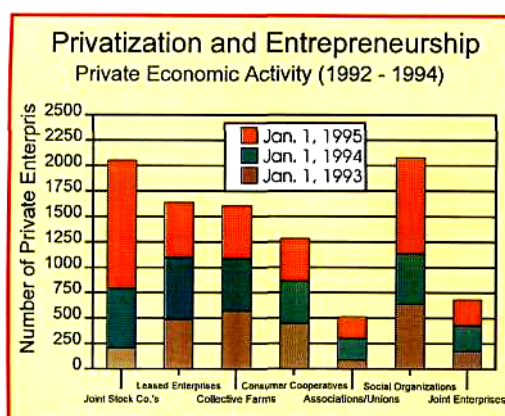
Overall, these figures indicate that immigration to and emigration from what were then-USSR nations increased substantially in the late 1980s. This occurred largely in reaction to the easing of political policies on intra-republican migration, as well as in anticipation of independence, as expatriate Moldovans from around the USSR began to return to their homeland. A very significant jump in emigration to far foreign nations, demonstrated in Figure 4.7 is indicative of the liberation of Moldovan emigration policies after the achievement of independence.

Figure 4.8



Subsequent to the liberalization of national migration policies, Moldova (and neighboring FSU nations) has been faced with the challenge of providing social support, employment, and housing to returning expatriate nationals. In the late 1980s, when the first call went out for

Figure 4.9



Moldovans to return to their homeland, the Republic was administratively unprepared to deal with the influx. Since that time, legislative reforms have been undertaken to establish realistic immigration policies, and an infrastructure for dealing with the social support of immigrants.

Moldova recognizes that intrinsic in the human right to free movement is the right to remain in one's country and one's home. Through its pursuit of privatization and economic reform, as well as the reform of social and unemployment services, the Moldovan government is working to reduce the economic difficulties which motivate much of the nation's emigration.

### Right to Own Property

As part of its transition process from a centrally-controlled, socialist system to a market-oriented democratic system, Moldova is undergoing an intensive process of privatization of formerly state-owned assets. The changes in property ownership which have taken place since the beginning of the privatization process are detailed in Figure 4.11. Between 1993 and 1994, 41 % of total domestic privatization and 25% of agricultural privatization took place. The progress of this privatization is

Figure 4.10

#### 1995-1996 Privatization Strategy

- Introduce incentives for enterprise staff to transform enterprises into competitive units;
- Complete privatization using bonds, and develop an additional mechanism for privatization, utilizing cash;
- Encourage the participation of local and foreign investors in privatization, to facilitate privatized enterprises' restructuring;
- Strengthen enterprises and state support, in preparation for post-privatization restructuring;
- Develop new forms of privatization, through tenders, investment tenders, and other open mechanisms to attract investors;
- Privatize the land on which private enterprises are located.

Source: Documents Prepared for Consultative Group Meeting, Paris, March 20, 1995, page 6.

Figure 4.11

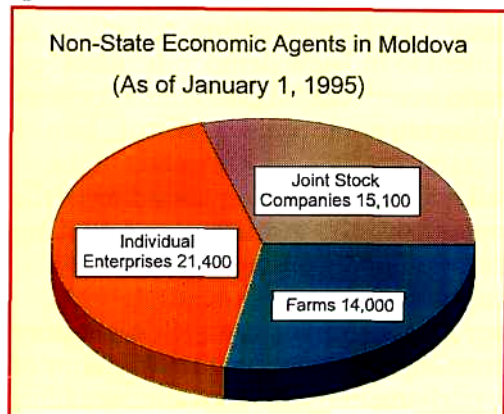
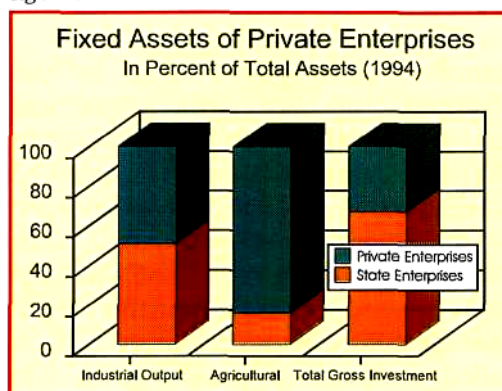


Figure 4.12



demonstrated in Figure 4.9. While Moldova currently operates under a dual sector (state and privately-owned) economy, the influence of the private sector is increasing significantly. By the end of 1995, two-thirds of the remaining privatization process is expected to be completed.

Despite the above successes, the privatization process is not proceeding as quickly and efficiently as initially anticipated. According to the Moldovan Academy of Sciences data, the slow pace of the process has resulted in the concentration of private property in the hands of a small minority, resulting in a significant social disparity -- the very rich and the very poor — which threatens to lead to social instability.

The government, in recognition of the need to accelerate the privatization process, has outlined a substantial plan of action for the future, detailed in Figure 4.10. Actions already undertaken in the realm of privatization include the following: the improvement of legislation of property reform, the training of staff responsible for privatization activities, the establishment of institutions for managing the privatization process, the promotion of public information activities, and the cooperation with international privatization experts.

### Freedom of Opinion, Expression, Assembly and Participation in Elections

Moldova's democratization process began long before the acquisition of independence; the seeds of democracy were planted, in part, through the words of writers, scientists, composers, publicists, and scholars in social humanitarian sciences who led the movements for civil liberties under the FSU. Since the achievement of independence in 1991, the process of democratization has continued. This long sought after democracy is intended specifically to ensure the population's democratic freedoms: of opinion, expression, assembly and participation in free and fair elections. The democratization process requires much more than just a change in political ideology — while that alone is a profound step; it also requires a supportive infrastructure.

In order to strengthen the capacity of the government, and to boost public perception of the ruling bodies and the new democratic system, as a whole, it is necessary for Moldova to continue in its efforts to establish the basic foundations of democratic government. It is also essential that the Moldovan people come to understand their role in influencing and guiding the national democratic political and administrative process.



## Overview of the Political Sector

Assistance to the government in the establishment of an effective political process and institutional basis can and should be pursued. This should be undertaken in recognition that not only are the strategies and concepts of independence, democracy and market economy new to this region of the world, but that the country, as a result, has a lack of skilled and trained personnel able to effectively pursue reform.

Such assistance has been provided by a number of international bodies, and will be soon supplemented through a broad based Governance and Democracy (GAD) Programme, executed by UNDP. This programme will specifically provide capacity building assistance to the Parliament, the judiciary, and local governments. Moldova needs additional political bodies which will study successes and failures of Moldova's past and promote strategies for its successful national development.

In addition to the above activities, Moldova's democratic reform process would also benefit significantly from the introduction of the concepts of ombudspersons and government watchdog organizations; and from the provision of support to the establishment of effective non-governmental organizations (NGOs).

### *Strengthening of the Parliament*

A democratically-elected Parliament was established for the first time within Moldova in the spring of 1994. This legislative body was faced with the task of ratifying a new constitution (which it did in late August 1994), and adopting a significant amount of legislation to transform the nation's legislative foundation to that of a democracy. It has been confronted by a number of challenges, including the lack of experience — among all Parliamentary members — working

within a democratic legislative system, and the need to convert sitting members of Parliament to the new democratic ideology, so far removed from the former-authoritarian communist system.

Overall reform and capacity building of the parliament would require the following steps:

- The establishment of a regulatory framework, to increase the efficiency of the parliament in this transitional time.
- The provision of training of parliamentarians and their staff in basic parliamentary activities, in general, and economic and market reform, in particular.
- The establishment of a network of advisors, specialists, and accessible databases which can be consulted for assistance in legislative activities.
- The initiation of computerization in the parliament, to increase its efficiency.

### *Strengthening of the Judiciary*

The Moldovan judiciary, like those of other FSU republics, faces the transition from a subordinate power (as it was under the Soviet regime) to an independent, autonomous power, which plays an integral role in the checks and balances system of the newly established democratic system. Yet, this system is faced with a number of obstacles which impair its effectiveness, including: a lack of qualified candidates for judgeships and other positions due to low salaries; a lack of information about the legal system, due to its highly transitional nature; a lack of knowledge amongst the legal community of the judicial activities of other countries, particularly Western democracies; and a lack of automation, which makes the system inefficient.

In recognition of these needs, judicial reform must include the following:

- The implementation of legal reform, to

ensure that existing laws correspond with the new democratic political system.

- The training and improvement of cadres, and to introduce them to different advanced theories, activities, and experiences.
- The improvement of access to, provision of, and processing of information, through the upgrading of legal libraries, the publication of law reports, the provision of computers and information handling systems.

### *Strengthening of the Local Governments*

The local governing bodies of Moldova, as in other republics of the FSU, are faced with the need to reorganize and decentralize in order to more effectively govern their regions, particularly in order to combat economic difficulties which reduce the effectiveness of social programmes. In order to achieve their political agenda, these bodies require strengthened institutional capacities for effective governing (including the establishment of highly specified and well defined roles for each branch of the local government); decentralization of formerly centralized economies and social safety nets, and the diversification of sources of income and employment. The latter is particularly significant for Moldova, which faces extreme economic difficulties, largely due to the costs of the transition period, further complicated by the loss of traditional trading partners and production declines in the agricultural and industrial sectors.

The specific needs of local governments in successfully achieving transition include:

- The establishment of short term (three to four year) projects on economic development and strategic planning within large cities and provinces.
- The provision of small business workshops and training materials, to assist communities in the diversification of their economic activities.

- The training of local government staff in financial and budgetary management.
- The computerization of main information systems in large cities and provincial centers.
- The establishment of a "sister city/town" programme for cities and towns in Moldova to learn from counterparts in Western Europe and North America

### *Strengthening of the Academy of Public Administration*

The Republic of Moldova established an Academy of Public Administration in May 1993, which was designed to fill the Republic's void of any formalized system of education in democratic government and public administration. Assistance to this Academy is currently being provided to Moldova by the European Union TACIS programme.

Support required to increase the capacity of the Academy includes:

- Support to faculty development and student learning, through the provision of education training, curricula assistance, and study tours to similar educational institutions in Western Europe
- Support to institutional design strategy and networking.
- Support in the acquisition and design of educational materials.
- Support in the acquisition of equipment, including computers, printers, software, fax machines, language laboratory equipment, video equipment, and simultaneous translation equipment.

### *Strengthening of the Department of Statistics*

The provision of support to the Department of Statistics is an activity which is essential for the government to increase its capacity to collect accurate data *on, and* therefore assess, the national situation. Current social and economic data, which is frequently out

of date, incomplete, or collected/analysed with statistical standards not recognized internationally, makes it extremely difficult for Moldova, as well as for potential international donors, to properly assess the political, social and economic conditions of the republic. Such difficulties have, for example, made the assessment of Moldova's level of human development more difficult to undertake, due to the lack of statistics for the production of human development indices. (See Chapter Six). It is therefore essential, for the successful operation of the democratic government, and for Moldova's successful transition, that the Department of Statistics seek international assistance in order to increase its capacity to collect, collate, analyze and disseminate data, in a timely manner.

### *Introducing the Role of the Ombudsman*

Not unexpectedly, during this transformation of Moldova's political system, there is a marked lack of an organized and publicly promoted system within the Government for the collection of public complaints/concerns, regarding issues reaching across the spectrum of social, political and economic sectors. One means to fulfill this need of the population for a political voice, and a political ear, is the establishment of an ombudsperson, to collect public concerns and officially present these to the government, with official data to support the public's requests.

The establishment of an ombudsperson is equally as important since, with the change from a socialist to a democratic political system, a significant amount of social support previously available is no longer provided by the government, and the population is frequently unsure of where to turn for support.

### *Government Watchdogs, NGOs and the Press*

The existence of political watchdog organizations, which survey the activities of public officials and governmental organizations in an effort to expose ethical breeches, may initially be considered unpopular by Government officials. In

reality, however, such groups are beneficial to the functioning of the Government, as they promote the pursuit of pure democratic government. Particularly in the region of the FSU, where, due to past practices, public trust of public officials is low, the establishment of such independent watchdog organizations would serve a twofold purpose: 1) to expose illicit activities by government officials, if only, thereby making political activity more trustworthy, and 2) increasing public trust in the activities of government and its officials.

In addition to watchdog organizations, democratic government is supported by the work of NGOs, which can especially serve to fill the voids created in the nation's social system by the national transition process, and the transition from Communism to democracy.

While Moldova awaits the formation of a political watchdog organization, the population relies upon the press to monitor the activities, and therefore protect the democratic ideals of its government. For this reason, freedom of the press—including the proliferation of non-state, uncensored newspapers, television and radio -- should continue to be supported as is the case at present.

### *Social Reform Reinforces Government Capacity*

One risk of Moldova's transition period is the increased discouragement and disillusionment of the population, which struggles daily with the social decline. Such disillusionment can lead to their questioning of Moldova's decision to be independent, and to their thinking nostalgically of the pre-independence era, when there was food on tables, medicine in pharmacies, books in school rooms, and fuel for the winter. In order to promote a better standard of living, and ease the Moldovan people through the transition process, it is essential that all programmes contribute to the nation's ultimate goal of sustainable human development, and

reassure the populace in their decision to pursue an independent and democratic future.

## **Right to employment, including equal pay, dignity of work, trade unions, and unemployment support**

### *Unemployment*

Perhaps the most severe and far-reaching impact of Moldova's economic transition - particularly due to the loss of international trading partners, the reduction of industrial productivity, and the privatization of state-owned enterprises -- has been the growth of unemployment. While the official rate at the beginning of 1995 was equal to only 20,500, the actual rate has been estimated at closer to 240,000 to 250,000 people of working age<sup>2</sup>. In the near future, with the expansion of the privatization process, particularly in industry, construction and social services, the rate is expected to climb to 300,000. Hidden unemployment (workers on forced leave or drastically reduced work schedules), salary arrears (equalling 17 million lei, or US\$3.8 million in 1995 alone), poverty level salaries (including a minimum monthly wage of 18 lei, or US\$4), and increasingly dangerous work conditions (based on Ministry of Labour, Social Protection and Family reports of increased trauma and mortality in the workplace) further compound the republic's employment crisis.

Moldova's unemployment results not only from the upgrading/streamlining of technologies, which reduce the number of required workers, but also from the loss of production demand; the latter situation is doubly traumatic, as it results in a drop in GNP, which impacts expenditures in all sectors of the economy, including the system of social protection. In such a situation, not only do the unemployed not have a monthly salary, they are also faced with a strained social security system, which struggles to support their subsistence needs. This lack of jobs in Moldova is augmented by national demographics,

which indicate that the number of young people reaching working age (16 years old) exceeds the number of people reaching retirement age by approximately 190%. This situation can only worsen as the nation's retirement age is increased in an effort to decrease pension demands on the national social infrastructure. Not only does it worsen the unemployment situation, and the resulting strain on the social safety net; it also reduces the future technical capacity of the nation ~ as young workers fail to gain employment, and thereby lose their technical skills.

In recognition of the saturation of the employment market in urban areas, many unemployed workers in Moldova have chosen to seek employment in rural areas. As noted above, this has resulted in an

*Moldova's great national poet and writer Mihai Eminescu reflected timelessly, in 1880, on the role which dignified work plays in the development and stability of a nation. Not only does work serve as a means of economic production, but also as a means to maintain national morale, and support a nation's sovereignty. The words of Eminescu can be applied today in a timely reflection on Moldova's independence; he states, "Free only is the man who, by his productive work, earns his own living....those who do not have anything can do nothing, and shall remain -- despite declarations of liberties ~ slaves, the slaves of their own needs, the slaves of those who have a piece of bread in their hands... Work is the only panacea against all social plagues and moral deformations..." Eminescu recognized 115 years ago what sustainable human development recognizes today: that work — dignified work ~ not only results in economic stability, but social stability, and ultimately, human development. Unemployment, as well as undignified/uninspiring employment, in contrast, can lead to a desperate cycle of national decline: moral decline, which can lead to social degeneration, which can lead to political instability, and ultimately, revolution.*



extensive shift in urban to rural migration. Unfortunately, the agricultural sector is not, at present, capable of absorbing Moldova's unemployed, as it too is facing economic strains. Between 1986 and 1990 alone, approximately 100,000 jobs in the agriculture sector were eliminated (at a rate of 400% of the previous 5 years). Increased automation, planned for the agricultural sector, will only serve to increase the job deficits in this field.

Reform of the nation's unemployment situation is an essential requirement for Moldova -- not only for its economic stabilization, but also for its role in overall national reform and stability, and human development in general.

The intensive promotion of private sector development, and the subsequent support and promotion of entrepreneurial activity, in the form of economic assistance - including low interest loans, tax incentives, and trade incentives -- and technical assistance -- including small business advisory services, must become a

government priority, in order to counteract the job losses resulting from enterprise privatization, reconstruction, and plant closure. The promotion of entrepreneurial activity is particularly appropriate for rural areas, which have increasing populations and decreasing number of jobs; and could benefit significantly from any assistance provided by the decentralization of community services (e.g. the establishment of private medical services, private shops, private schools, etc.) Assistance to these activities, particularly technical advisory services to small and medium sized

Figure 4.13

#### Negative Influences of the Soviet Era on Moldova's Educational System

- excessive centralization of education;
- uniformity of educational structures at all levels;
- complete subordination of education to state and party structures;
- ideological Communist party control of educational curricula, technologies, and the spiritual life of pupils, students and teachers;
- disguised militarization of education;
- disregard of educational attention to social, religious and ethnic groups;
- use of authoritarian pedagogical technologies;
- neglect of teacher and pupil creativity;
- denationalization of education.

*Moldovan Ministry of Education*

Figure 4.14

#### Strategies of Educational Reform in the Context of Sustainable Human Development

- the legal prohibition of governmental or opposition parties from ideologically influencing education; and the upholding of the right to education's self-development at the conceptual, scientific, methodological and curricular levels;
- the elaboration of legislation in the field of education;
- the humanization, diversification, and individualization of education;
- the synchronization of educational content with new educational structures and international educational standards;
- the preparation of all levels of educational staff at internationally respected competence levels;
- the diversification of the types of general professional and higher educational institutions;
- the promotion of a national consciousness of the priority of education in social development;
- the connection of the Republic to international educational centers and information systems;
- the establishment of a legal framework concerning intellectual activity and property;
- the elaboration of new systems for training and testing didactic staff;
- the establishment, at the parliamentary/ governmental level, multilateral cooperation with other states in the sphere of education and science;
- the organization of psychological counselling services in schools;
- the establishment of a diverse system for educational financing, and the development of private and alternative educational systems;
- the correlation of education with other social spheres;
- the creation of an autonomous system of educational evaluation and accreditation; and,
- the establishment of new principles for evaluating and remunerating didactic staff, at all levels.



enterprises, is currently being provided by a number of international organizations, including the United Nations (Small and Medium Enterprises Project), among others. Other government priorities for reducing unemployment include the following:

- The provision of governmental support to migrant laborers, as a temporary measure for bringing economic resources as well as technical experience back to Moldova.
- The realistic determination of official unemployment, in order to ensure that social services can be planned accordingly.
- The provision of temporary government support to enterprises to prevent the layoff of employees, as well as to allow enterprises to continue production.

### *Pensioners*

Moldova's Ministry of Labour, Social Protection and Family currently supports a diversity of pensioners, including retired workers, victims of communist crimes (unlawful imprisonment or confinement to psychiatric institutions, deportation, and confinement to prison camps or ghettos), the disabled, and mothers with multiple or disabled children. By far, however, the largest segments of pensioners are the elderly.

Moldova's retirement age is currently 60 years for men and 55 years for women. The social protection network of the country therefore needs economic support for the retired, specially for their health protection and other services.

Approximately 56,300 citizens of the Republic of Moldova, i.e. about 8,5 percent are retired and entitled to receive pensions.

### *Right to Education*

Educational reform, in any nation, is an essential prerequisite for achieving sustainable human development. In Moldova, it is not only economic difficulties

of transition which have impacted the integrity of the educational system, although these have certainly taken their

"It is education which creates manpower, and the scientific, cultural, spiritual and political potential of a society -- decisive factors which ensure sustainable human development..."

*Mr. Vladimir Gutsu, Ministry of Education*

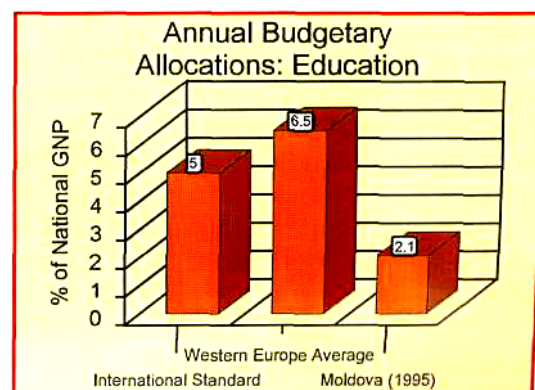
toll. Equally significant are the inequality accorded to the educational system during the Soviet era as defined by the Moldovan Ministry of Education. (Figure 4.13). The use of the educational system as a tool of politicization and militarization, and as a means to promote one ethnic group at the expense of another, was a direct limitation of the Soviet people's right to education. In Moldova, for example, ethnic divisions in educational opportunities led to ethnic-Moldovans being only 38th among all USSR ethnic groups, with regards to their level of education.

In addition to the need to reform past injustices, the Moldovan educational system faces a number of challenges resulting from the period of transition, including financial difficulties. (See Figure 4.15). According to the Ministry of Education, if the decline in the educational system does not reverse itself, Moldova "runs the risk of becoming the nation with the lowest level of education in Europe."

### *Strategy for Educational Reform*

In its pursuit of educational reform, Moldova seeks to achieve internationally

Figure 4.15



accepted standards of education, even though recognizing the need for much advancement (See Figure 4.16). With educational reform, geared to promote the principles of coherence, functionality, self-

*If you plan for a year, plant rice.  
If you plan for ten years, plant a tree.  
If you plan for a hundred years, educate your children.*

*Chinese Proverb*

development, democratization, diversity, and openness of character, Moldova will be better prepared to successfully achieve transition and development. The goals of Moldova's specific educational reform strategy are defined in Figure 4.14. Once achieved, this reformed educational system can be used to promote the nation's economic development, by training professionals in new methodologies appropriate to the transitions from communism and a centrally-managed economy to democracy and free market economy. In particular, in order to achieve sustainable human development, it is essential for Moldova to promote the pursuit of higher education. Although the establishment of institutes of higher education has increased in Moldova in recent years, the total number of students educated therein has decreased. On an international standard, as visible in Figure 4.17, Moldova is far behind its international counterparts in the level of education of its population. Tertiary and technical education must continue to be promoted in Moldova as an investment in the economic, social, political and cultural

Figure 4.16

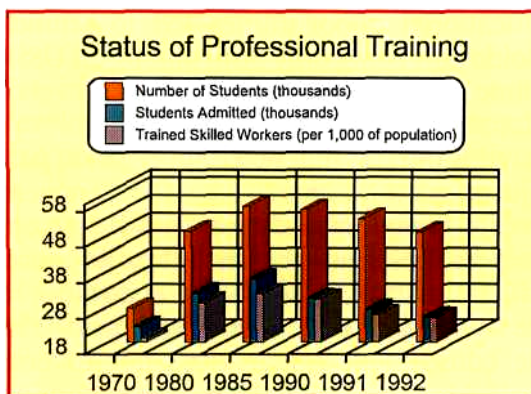
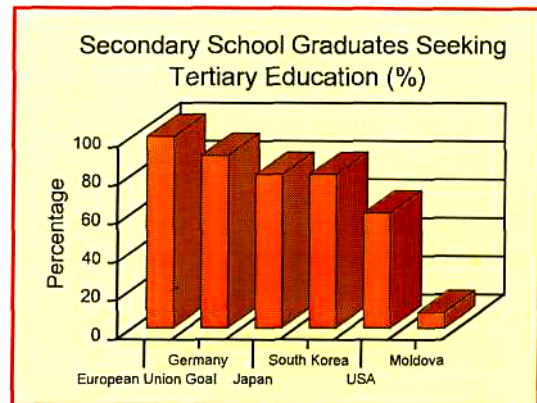


Figure 4.17



future of the country.

### **Right to health**

Like the other facets of Moldova's social sector, the health protection sector has been hit hard by the economic hardship of the transition process, as well as by the transition from central to free-market economy. Under the socialist system of the Soviet Union, health care was guaranteed to the population, and provided free of charge. Under the nation's new free-market economic system, health care is expected to come largely under reform. At present, health care is still theoretically free of charge, although patients are required to find and purchase most of the expendable

Figure 4.18

#### Educational Objectives (According to the International Community)

- Development of a child's personality, and his/her mental and physical abilities to his/her maximum potential;
- Development of respect toward fundamental human rights and liberties, as well as principles registered in the United Nations Charter;
- Development of the respect to child's parents, his/her identity, language and cultural values, as well as for the national values of the residence or origin country;
- Preparation of a child for assuming responsibilities of life in a free society, in the spirit of understanding, peace and tolerance, equality between sexes and friendship between all nations and ethnic, national and religious groups and persons of native origin.
- Development of respect of the environment.

medical supplies and Pharmaceuticals, and are compelled by a *de facto* obligation to pay under-the-table fees to health practitioners in order to receive quality medical care. A significantly-reduced availability of medicines, vaccines, and other medical supplies — due largely to the lack of financial resources with which to purchase them, and a lack of international trading partners from which to obtain them — further compounds the health care crisis. Currently Moldova has only 30% of the medications it requires, and, overall, a huge deficit of anesthetics, analgesics, antibiotics.

Moldova's current national health care budget, reflective of the situation noted above, at US\$20 per person per year, is only 35% of that required for minimal health care services. Unfortunately, management difficulties in the health care field further diminish health-related resources. Irrational expenditures in health care -- for example, the unnecessary increase of doctors and hospital beds to rates 1.5 to 1.8 times the European average<sup>3</sup> -- increase the cost, but not the capacity, of the republic's overall health care system.

Health care reform, particularly during this period of transition and economic crisis, requires significant change in health care management, including, in particular, the promotion of primary and preventive health care. The increase in preventable malnutrition, hypovitaminoses and anaemia in the Moldovan population, for example, has contributed to a number of other more costly and traumatic medical problems, including increased rates of infant, child, and maternal morbidity and mortality. In 1994 as opposed to 1990 infant mortality has increased from 19.8 to 24.0 out of 1,000 new-born, which is a 22 percent increase. Maternal morbidity in 1994 was 53 cases out of 100,00 women. Currently, a slight decrease of abortions rate is noted, it still being very high (94.7 abortions to 100 new-born children). These indices could be reduced through the proper education of the public in the use of contraceptives and safer sexual practices. Moldova's increasing commitment to

primary preventive health care, particularly in the field of family planning, as noted above, was reflected in its holding, subsequent to the UN's International Conference on Population and Development in the autumn of 1994, of its First National Conference on Family Planning, and its establishment of a broad platform of action.

Increased incidents of malnutrition and hypovitaminoses, and an increased abortion rate, while indicative of a need for preventive health care techniques, on a deeper level, demonstrate the extent to which the nation's declining standard of living has impacted the lives of the population.

### *Substance Abuse*

Indicative of social distress, the rates of alcoholism and drug use are on the increase in Moldova.

The official rate of alcoholism in Moldova, in 1994, was three times the rate recorded in 1986. Since 1992, official rates of alcoholic psychosis have increased 1.5 times, while alcohol-related death in hospital' has increased 2.3 times as opposed to 1993. This significant rise in alcohol-related morbidity and mortality is partially attributable to the increased availability of low priced Moldovan wine and brandy - two of the republic's most significant export commodities — on local markets, due to the breakdown of international trade. The increased availability of alcohol, combined with high rates of unemployment, and overall social decline, create a formula for alcohol abuse. The rate of male to female alcoholics is currently 5 to 1; of female alcoholics, 48% are the primary caretakers of three or more children. Overall, 300,000 persons (8% of the population) have problems related directly or indirectly to alcohol abuse.

Drug addiction is a serious problem in Moldova. As opposed to 1990, in 1994 drug addicts morbidity has grown by 36 percent, especially among youth. In 1994 1,400 drug addicts were subjected to clinic

treatment. Sixty thousand *drug users* are currently registered in the country . The increase in drug use is also due to increased levels of drug trafficking in Moldova resulting, in part, from the crackdown on drug trafficking in neighboring countries, and the resulting diversion of Asia to Europe drug trade through Moldova. In recognition of the need to control drug trafficking, cultivation, processing, and abuse, the Moldovan government has appointed a team of state bodies, including the Ministry of the Interior, Ministry of National Security, State Department for Customs Control, Ministry of Health, and the Office of the Prosecutor, to work in coordination on illegal drug issues. Additional international assistance is planned to be provided to the Moldovan government by the United Nations Drug Control Programme, particularly in the field of legislative reform.

#### *Environmentally-Related Illness*

As will be discussed in greater detail below, the territory of Moldova endured enormous environmental devastation in the past half-century, particularly during the Soviet era, which resulted in the extensive chemical pollution of land, water resources, and air. Ultimately, this pollution has resulted in negative consequences for the health of the Moldovan population.

The legacy of the overuse of agricultural chemicals — pesticides and fertilizers -- during the Soviet era is visible in the health problems of the people. Abnormally rates of gastrohepatic pathologies are attributable to the consumption of remnant agricultural chemicals on food and in water. In regions with chemically polluted water general child morbidity is 3.8 times greater, while gastro-hepatic morbidity is 2.5 times greater than in unaffected districts. The Moldovan Government recognizes the very real danger to the health of its people, resulting from this chemical contamination, and is pursuing reform through its Sustainable Development strategy, discussed below. (See ***Right to Environmental Security.***)

*In addition to local environmental offenses*, Moldova has suffered extensively from the environmental accidents and/or disregard of environmental hazards occurring in neighboring regions. The most dramatic offense was the meltdown of the Ukrainian Chernobyl nuclear reactor, located 240km from Moldova's northeastern border. While international experts note that the majority of the fallout from the accident moved northwest, thereby sparing Moldova from its direct impact, health indicators from the north of Moldova -- including cancer rates 40percent higher than those of southern Moldova -- demonstrate that the republic was not completely spared. The Chernobyl accident, and the presence of 8 other nuclear reactors within 400km of Moldova's borders -- in neighboring Ukraine and Romania -- demonstrate the need for Moldova to work with its neighbors to define an international nuclear regulatory and safety policy.

#### *Goals for Reform*

The Moldovan Ministry of Health has determined that it requires a total of US\$200 million to halt the decline in the nation's health care system, and achieve reform based on international health care standards. While Moldova received urgent and most welcome international assistance in 1994, valued at 15 million lei (US\$3.4 million), the disparity in required and possessed resources demonstrates that much more is needed, and that reform will be slow. In the meantime, in an effort to halt the health care decline, the Ministry of Health has set forth the following key strategies in order to best address the urgent medical needs of the Moldovan people during this era of transition: improvement of maternal and child health care, provision of early and timely treatment of illnesses, and the provision of improved treatment to patients suffering from chronic diseases. In addition, the Ministry will support the nation's sustainable development policy, for the eventual elimination of environmentally-induced health problems.



## Right to Environmental Safety

The concept of environmental safety, and ultimately that of Sustainable Development (SD), was not included in the original International Declaration of Human Rights, as proposed in December 1948. Indeed, environmental destruction, so much a product of global industrial and economic development, has accelerated dramatically and reached a crisis level only in this, the second half of the 20th Century. Thus, while the right was not originally included

*The almost complete victory of humanity over nature is on the verge of becoming a defeat, for the destruction of the environment means nothing more than the destruction of the foundation of human existence. The exhaustion of material and energy resources, the pollution of the environment, and the explosion of the population threaten the very existence of human society. The protection of the environment must therefore be a human priority.*

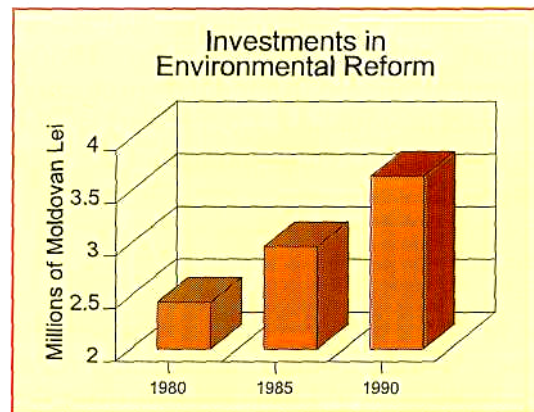
*Haralambie Corbu  
Academy of Sciences of Moldova*

in the declaration, due, at that time, to a lack of awareness of the impact of environmental devastation, it was implied in the Declaration's rights to life, liberty and the security of a person, among others.

At the United Nations Conference on Environment and Development (the Earth Summit), held in Rio de Janeiro in 1992, heads of state from around the world adopted "Agenda 21". Moldova, too, signed in support of this agenda, which called for international cooperation in the field of environmental protection, and in pursuit of global sustainable development.

This was important given the environmentally unsound agricultural development policies of the former Soviet era — particularly on collective farms, policies based on ignoring the environment. These included the acute specialization of farms, excessive pesticide/fertilizer use, and excessive irrigation practices, wreaking havoc with soil and water; similarly poor policies of the Republic's economic complex

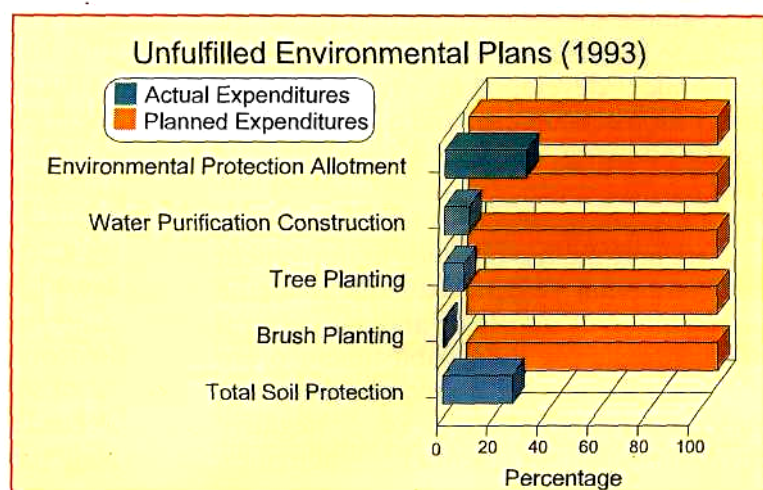
Figure 4.19



— industry and agroindustry — resulted in further *damage*. Prior to 1985, the Moldovan public remained uninformed about the extent of the Republic's environmental damage; also prior to that time, environmental impact was rarely if ever considered during national decision-making processes. In light of its history, Moldova initiated, in the mid-1980s, a process of environmental reform. As well as its global commitment to environmental protection, Moldova has initiated a local commitment — a Strategic Programme for the Year 2005.

Since the nation's acquisition of independence, however, economic commitment to environmental reform activities has been undermined by the nation's economic crisis. While economic investments in environmental protection have been planned (Figure 4.19), Figure 4.20 demonstrates that due to economic difficulties, expectations cannot always be fulfilled. Since achieving independence, budgetary allocations for environmental

Figure 4.20





protection have dropped by 24.9%. Even the allocations are not always utilized as planned. While in the late 1980s, investment in environmental protection and reform equalled 1.5 percent of the gross national revenue, today it is less than 1 percent.

### *Plans for the Environmental Future*

The Moldovan government recognizes its reduction in environmental expenditures to be a problem. And as is evident from the Moldovan National Programme for Strategic Action in the Environment, despite the nation's economic difficulties, the republic is dedicated to environmental reform. The Programme supports environmental conservation, resource protection; demographics monitoring; rural development; forest conservation; biodiversity protection; potable water protection; technology transfer with other nations, as appropriate; and calls for the dedication of finances to the national effort. In addition to the Agenda 21 concepts, the Moldovan policy is nationally specific, and addresses the impact of the national transition, including the privatization of land and industry, on the environment. This is particularly urgent, as the state will lose direct control over these economic units, and without regulation, the drive for profit, particularly during these economically oppressive times, could lead to environmental disregard. The Moldovan government recognizes that the formation of a market economy does not automatically guarantee the pursuit of sustainable development; the National Programme for Strategic Action therefore works to promote environmentally friendly economic development through the integration of economic and environmental decisionmaking.

The Programme also calls for the creation of laws and the use of funds to implement environmental reform subsequent to the privatization of industrial and agricultural units. It calls for the establishment of an "Environmental Code", and the licensing and/or prohibition of negative environmentally-influential activities.

Additionally, it calls for the assessment of radiation security, the utilization of synergetic fauna, waste production and utilization, and for the protection of

Figure 4.21

#### The Main Goals of Moldova's National Programme for Strategic Action in the Field of Sustainable Development

- The elimination of sources of environmental degradation and pollution;
- the solution of priority ecological, economic and social problems, and the coordination and integration of decisions;
- the integration of national strategies into regional and global strategies on the basis of international assistance and expertise;
- the growth of human development and the improvement of the standard of living of the population;
- the creation of objective prerequisites for sustainable development in Moldova.

biodiversity.

In recognition of its international obligation of environmental reform, Moldova seeks to revise its environmental standards in accordance with European Community Standards. Moldova seeks, in cooperation with the United Nations, to pursue sustainable development, which includes maintaining the stability and capacity of the nation to support population growth, to reduce dependency on non-renewable energy resources; to preserve soil, to protect the biosphere, to promote recycling, to pursue economic growth while at the same time preserving natural resources, and to increase public awareness of environmental issues through education and through the environmentally-sound example of governmental and non-governmental activities.

The status and strategy of Moldova with regards to water, land, air, and energy use, industrial policy, and waste management are addressed, in detail, below.

### *Water Resources*

According to Mr. Ion Dediu of Moldova's National Institute of Ecology, leakage of

agricultural and toxic chemicals into Moldova's water tables, and the pollution of its rivers, both within Moldova as well as in neighboring Ukraine and Romania, has resulted a devastating fact: the quality of Moldova's water resources can be considered the poorest in Europe. Approximately 60% of all water wells in rural areas are contaminated. Contaminated waters have resulted in high levels of infant, child and adult morbidity, particularly due to gastrohepatic disorders.

In addition to water contamination, Moldova is becoming increasingly subject to drought. Meteorologists now consider that drought in Moldova will become an annual to biannual event; indeed Moldova was subject to agriculturally devastating droughts in the summer 1994. The meteorological tendency for drought in Moldova is compounded by the of density of the republic's population, which also results in a high rate of domestic water use. In light of these difficulties, the government of Moldova has established a water preservation policy, as described in Figure 4.22.

### *Land and Soil Preservation*

In terms of fertility of soils, the Republic of Moldova appears to maintain the first place in the world. The humus rich chernozem soil comprises 75% of its land. The deep, rich black earth is the basis of Moldova's historical agricultural wealth, and the inspiration for humorous folklore, including a saying which boasts, "Plant a stick upside down in the earth and a tree will grow."

Tragically, the integrity of Moldova's rich agricultural land has been compromised after years of intensive, chemically-supported, and environmentally oblivious agriculture. The scientific law of the degeneration of soil potential notes, "each additional investment of capital/labour will become less efficient, and at a certain point, further investments will become ineffective — and the capacity of the soil will be lost." In accordance with this law, in the last 25 to 30 years, Moldova's soil quality has

Figure 4.22

#### Measures Required to Ensure Sustainable Use of Waters

- The declaration of water resources as property of the whole society;
- The improvement of systems of calculation, planning, accumulation and rational utilization of water resources, through the use of advanced technologies;
- the improvement of water quality and the recycling of water used in industry;
- the creation of adequate systems of protection of rivers and water reservoirs;
- the improvement of legislation on the utilization of water and the initiation of complex scientific multidisiplinary research in this field; and,
- the elaboration of programmes for the management of water resources on the Nistru and Prut rivers, as well as for underground waters utilization.

declined by 25%, which means that 216 million tons of high quality organic matter is necessary to compensate for the lost humus on the arable surface of 1,744,500 hectares (1994) with a layer thickness of 0.2 meters.

In order to preserve the remaining agricultural potential of the nation, Moldova's agricultural policy must be reformed. Crop rotation -- which results in the diversification of nutrient needs and gives soil the opportunity to regenerate -must be promoted. Organic farming techniques -- utilizing natural instead of chemical fertilizers -- should also be investigated and promoted on a national scale; this is doubly significant because not only is it beneficial for the soil and the people, due to the decreased use of toxic fertilizers, but, practiced correctly, can create higher harvest yields without the investment in expensive chemical fertilizers and pesticides.

Moldova's soil integrity is also diminished seasonally through the effects of erosion. It is estimated that approximately 25 million tons of Moldova's most fertile top soils are lost annually to erosion<sup>4</sup>. A number of steps must be undertaken in order to diminish this risk. Firstly, the production of

perennial crops must also be increased (by approximately 20%) and that of annual crops decreased (by approximately 40%), as a means to reduce the plowing of the soil, and therefore the potential for topsoil loss to rain or wind. Secondly, strict terracing laws should be established and implemented, and land subject to landslides and erosion should be excluded from cultivation. Recognizing that land privatization will result in a reduction of the direct influence of the state on agricultural activity, this and all land and soil legislation should be designed taking into account this new administrative arrangement; in particular, environmental criteria should be elaborated for private farms.

### *Air Quality*

Pollution from industry and agricultural activity, as well as from vehicular activity, has resulted, in Moldova, in air pollution consisting most significantly of dust, nitric oxides, sulphate oxides, carbonic oxides, and heavy metals. In industry, only 30% of enterprises (5,378 in total) have air pollution purification systems; of these only 4,417 are functional. The reduction in industrial productivity of the nation, while economically distressful, has, nonetheless, resulted in a respite for the environment; while industry previously released approximately 167.6 tons of pollutants into the atmosphere per year, this figure has reduced dramatically with industrial decline. Fuel combustion, particularly vehicular in origin, continues, however, resulting in the release of carbonic oxides into the atmosphere. As high quality fuels are currently not available in Moldova, other efforts should be taken to promote the conservation of fuel, and thereby reduce combustion emissions.

In addition to air pollution from national sources, Moldova suffers the effects of international air pollution. Foreign air pollution, particularly that originating in Ukraine, Romania, Czech and Slovakia actually contributes 400%

to 500% more pollution to Moldova's air than internal Moldovan pollution. Whether from internal or external sources, the pollutants found in Moldova's air negatively impact the health of the population, influence the loss of forests and animal life (biodiversity); and gradually destroy cultural monuments. Steps in promoting air quality control, including the use of industrial air filters and the promotion of environmentally sound industrial technologies, the use of higher quality fuels, and the reduction of polluting activities must be undertaken. Additionally, international agreements on air pollution control must be achieved, in recognition of the global impact of environmental devastation.

### *Energy*

Moldova, energy resource poor, is forced to import nearly 100% of its energy resources, with the exception of electricity produced by the nation's one hydroelectric power plant. Due to the republic's internal energy deficit, research has been undertaken on the potential of renewable energy resources.

Studies of Moldova's solar energy capacity indicate that the 550-600kcal/cm<sup>3</sup> of energy received on sunny days is sufficient for the use of solar technology. This renewable energy resource is particularly applicable to Moldova, as solar technologies are already produced in the national industry, and a number of Moldovan scientists currently specialize in solar cell technology and application.

Wind presents another potential energy resource. According to investigations by the Academy of Ecology undertaken in previous years, Moldova's annual average wind speed of 2.25-4.5 m/s is sufficient to permit wind-powered generator installations to convert wind energy into electrical energy. Moldova's vast expanses of open fields serve as strong potential sites for windmill installation.

While biogas energy is relatively unexplored in Moldova at present, the republic's significant agricultural base presents a strong potential for the pursuit

of biogas production and utilization.

Moldova has no nuclear power plants within its borders, although it has 8 within 400 kilometers of its boundaries, located in Romania and Ukraine. While Moldova currently has no plans for the construction of a nuclear power plant, it nevertheless has a great need to establish a state body to manage nuclear safety and radiation security. As noted above, the influence of the Chernobyl reactor meltdown in neighboring Ukraine magnified the nation's need to establish policies for *dealing with foreign nuclear power plants*, over which the republic has no operational or legal control, yet from which it can be significantly impacted in case of disaster. Moldova is working with the United Nations in an attempt to establish international operating agreements with its nuclear- powered neighbors.

### *Waste Management*

The Moldovan government is committed to cleaning up waste sites, particularly toxic ones remaining from the Soviet era, and establishing regulations to create/enforce waste management schemes, particularly in the fields of industry and agriculture. In addition to clean up and regulation, Moldova is promoting activities in the field of waste management, including the establishment of recycling programmes, the promotion of regional/national programmes on waste minimization, and the establishment of a national database to monitor waste sites and the production, transportation and elimination/neutralization of toxic substances. Overall, Moldova seeks to coordinate and implement state programmes in accordance with European Community standards.



# Sustainable Human Development in Moldova: Prerequisites to Sustainability

## Prerequisites to Sustainable Human Development

Moldova's commitment to the concept of sustainable human development, as seen through the nation's devotion to the promotion of the inalienable rights of its population, is evident. Ideologically, Moldova is unquestionably committed to human-centered development. In order to fully pursue sustainable human development, however, the Republic must have a strong national infrastructure upon which this development can be sustained. This infrastructure consists of a strong economic development policy; a dedication to science, research and development; and a well planned international assistance strategy. Only through the achievement of these three fundamental systems will the foundation for sustainable human development be achieved.

## Economic Reform

As noted by Mr. Andrei Andriesh, President of the Moldovan Academy of Sciences, "The first condition for sustainable human development is economic development, and the achievement of a gross national product (GNP) similar to that of developed countries."

In recognition of the interdependence of human development and economic development, the Moldovan government has designated sustainable and human-centered economic reform as its top priority. The government priorities for economic development for 1995 to 1996 — including industrial, agricultural, banking, tax, and monetary reform — are detailed in Figure 5.1.

In support of these activities, the Moldovan government has undertaken broad legislative reform in the economic sector, including the passing of more than 400 laws establishing the basis of the nation's market economy -- including laws on taxation, private sector reform, banking, trade and enterprise development.

While Moldova's economic reform process during the transition period has been slow, the overall reform strategy is considered to be sound, and a number of successes have been achieved. The indicators of success of the economic reform process, according to the Ministry of Economy, are detailed in Figure 5.2.

However, some view these successes more conservatively. They consider, for example, that while the stabilization of the national currency is a positive economic indicator, its stabilization was not based on Moldova's increased national production, but instead on World Bank development loans. Thus, the stabilization, while positive, has been artificially induced. Overall, the purchasing power of the Moldovan lei's has actually dropped by 330% since its introduction in 1993.

The field of international trade also faces difficulties despite the establishment of new international trading partners. At present, Moldova faces extreme economic difficulties resulting from the loss of contact with former international trading partners since the breakup with the Soviet Union. This breakup resulted in both the reduction in the nation's capacity to import raw materials required for industry, as well as decreased orders for traditional export products. A January 1995 UNDP funded Workshop on CIS and Baltic States



Figure 5.1

### Priorities of Moldova's Economic Reform

- Increase national industrial capacity by increasing the modernization/efficiency of factories; providing state of the art training to workers; improving industrial management techniques, and promoting planned conversion of high-tech Soviet-era industry -- including military industry -- into peace-time production facilities.
- Increase national agricultural potential through the adoption and promotion of environmentally sound agricultural techniques; the clean up and revitalization of land and waters damaged through intensive agricultural activity; the improvement of agricultural management and training; the successful privatization of agricultural holdings; and the promotion of modern farming technologies.
- Promote banking reform to ensure a favorable investment and lending climate for national and international investors.
- Pursue tax reform -- including the establishment of a national treasury for resource management/monitoring, the formation of budget planning/monitoring/reporting systems, and the creation of more efficient collection systems -- as a means to strengthen the national economy.
- Continue to pursue monetary reform activities, including the stabilization of the Moldovan lei -- not through the support of international loans, but through increased national economic capacity.
- Finalize the privatization process of personal dwellings, farms and enterprises.
- Diversify international trading partners -- in order to reactivate traditional trading links, while at the same time finding new trade outlets.

Trade, held in Moldova, sought to deal with these difficult trade imbalances, through the reestablishment and decentralization of trading contacts formerly controlled via Moscow. The establishment in Moldova of a Center for the Promotion of Trade, planned for 1995, will be an enormous asset in the promotion of traditional as well as non-traditional trading links.

Another economic difficulty for Moldova has resulted from price reform/

liberalization. Increased prices have resulted in the loss - at least temporarily - of traditional markets. For example, in Russia, due to the rise in the prices of Moldovan agricultural products, it is actually cheaper to purchase agricultural products from China, Vietnam, Australia and New Zealand, than similar products from Moldova. The prices on exported agricultural products, for example, have increased to such an extent that they are unable to compete in Western or former Soviet markets. As of January 1995, due to

Figure 5.2

### Signs of Economic Stabilization in 1994

- A stable national currency. The Moldovan leu (US\$ 1 per 4.4 leu) was introduced as the national currency on 23 November 1993. In 1994, the leu's exchange rate for the US dollar was stable and more positive than those of the country's primary trade partners -- the Russian rouble, the Romanian leu and the Ukrainian Karbovanet.
- The budget deficit in 1994 was 3.4% of the Gross Domestic Product. (In 1993, it was 6.5%.)
- A drop in interest rates from 377% at the beginning of 1994 to 42% in December 1994.
- An increase was recorded in the number of industrial enterprises which increased their production output in the production of steel, pumps, agricultural machines, textiles and jersey, among others.
- The establishment of joint-venture companies with foreign partners is underway; at the start of 1995, there were 295 such joint-venture enterprises.
- A 130% increase in total investments in the national economy during 1994, and a 170% increase in savings deposits of the population in Savings Bank institutions.
- Price liberalization, including prices for bread and dairy products. The state currently registers only prices of monopolists.

*Ministry of Economy*

lack of markets, 25 million lei (US\$5.7 million) worth of agricultural products were sitting, unsold, in industry warehouses<sup>2</sup>. (Figure 5.3) The inability of Moldova to compete in international market serves as an indication that Moldova must either identify new markets for its national production, or reevaluate its export pricing strategies.

Other difficulties facing Moldovan economic reform include unfavorable taxation and lending practices, which hinder entrepreneurial development; the decline in agricultural and industrial development and GNP (by 26%, 29.9%, and 40% respectively) since 1989; a 34% decline in industrial production and a 26% decline in agricultural production in 1994.

### *Moldova's Economic Model*

In order to deal with the above mentioned difficulties and work towards economic development, it is necessary for Moldova to adopt a situational specific economic model to guide its economic reform and development. The most appropriate economic model for Moldova continues to evolve with the evolution of the Republic's economic conditions and potential. Of Western models of economic development, the European model is considered to be most appropriate and applicable to Moldova<sup>3</sup>. Unlike the American model, which emphasizes liberalism

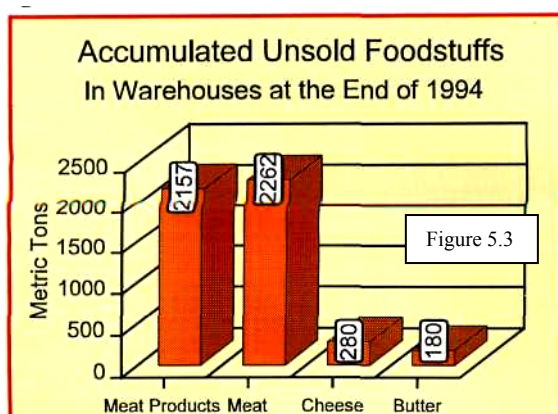
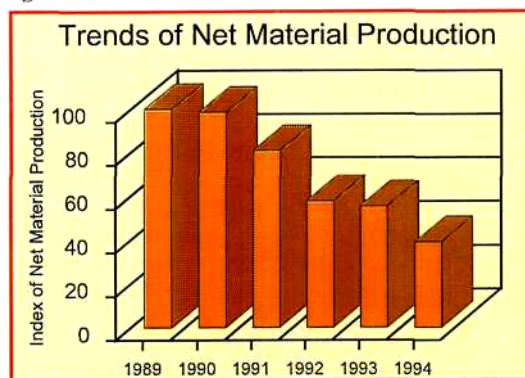


Figure 5.4



and private enterprise development, the Western European model emphasizes economic development linked to social protection. Particularly taking into consideration Moldova's socialist history, and its growing need to establish a dependable system of social protection, this model is that which most appropriately meets Moldova's economic development needs.

### *Actions Required for Further Economic Reform*

Based on the above mentioned successes and difficulties in Moldova's economic reform strategy, the following actions are necessary in order to hasten the establishment of a sound economic foundation for the Republic:

- the promotion of increased investment (foreign and national); the continuation and acceleration of the national privatization process;
- the continued promotion of entrepreneurship (particularly through small business advisory centers, like those of UNDP);
- the restructuring of enterprises, through the creation of joint-stock companies (JSCs), the merging or dividing of enterprises, the establishment of foreign joint ventures; and the dismantling of afunctional enterprises; in order to maximize profit and employment potential while, at the same time, ensuring that technological potential — particularly unique and highly technical production

methodologies --is not lost;

- the initiation of a public information campaign to describe, to the public, the rationalization for enterprise restructuring, particularly noting its expected role in the further development of private enterprise and jobs;
- the reduction of monopolies, particularly in the agricultural sector;
- the promotion of technologies which

- development and foreign investment;
- the promotion of further tax reform, including the improvement of the national system of taxation administration; the strengthening of tax authorities; the improvement of tax collection; and the promotion of tax education for the general public; and,
- the promotion of environmental respect in all aspects of economic activity, but particularly in the industrial and agricultural sectors.

Figure 5.5

#### MOLDOVA'S CHALLENGES IN AGRICULTURAL REFORM

- To reform the agricultural sector, without destroying the significant material potential established in the post-WWII era;
- to re-establish property rights to lands revoked during the Soviet era, providing for limitations on property size;
- to eliminate negative socioeconomic relations forcibly imposed during the Soviet era, and create conditions for the transition to contemporary relations;
- to halt production declines in all branches of the agricultural sector, and to secure environmental protection and sustainable development for the future;
- to establish management and organizational styles which will increase productivity and product quality, and will result in the lowering of product prices; but will, simultaneously, respect workers right to property and personal interests; and,
- to solve the major difficulties facing rural areas, particularly the problem of unemployment.

minimize the use of energy and materials consumption, which rationally utilize labour forces, and which are environmentally sound;

- the pursuit of sound agricultural reform (as described in Figure 5.5);
- the modernization of the national infrastructure, including the restructuring of Chisinau Airport and the modernization of the national telecommunications system, as a means to promote further economic

## Industrial Development

Moldova's industrial sector is superior to its agricultural sector in its capacity for economic production<sup>4</sup>. It, above all other economic components of the national economy, has the potential to raise Moldova out of its *economic* depression, and establish the sound economic foundation required for the achievement of sustainable human development.

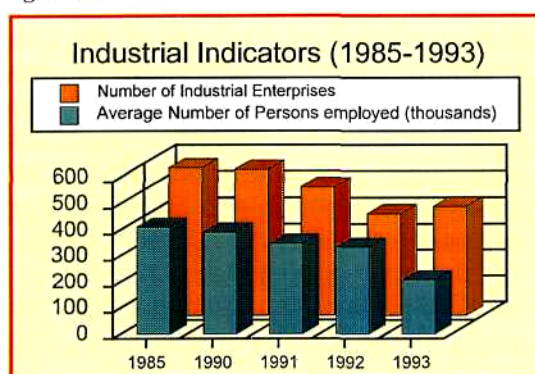
In the past, Moldovan industry has been responsible for 60-70% of Moldova's budgetary profits. Since Moldova requires only 30% of industrial production (when the industrial sector is operating at production capacity) to maintain a quality standard of living of its populace, the remaining 70% becomes available for export.

In order to maintain the high industrial potential of Moldova, it is absolutely essential that technical educational facilities and highly-trained technical staff be maintained.

### *Technical Reform in Industry*

Moldovan industry has a high level of technical potential, much of which - including micro- and optical electronics, information technologies, etc. -- was developed during the Soviet era for the purpose of weapons production. Without losing the high technical capacity of industry, restructuring of industrial

Figure 5.6



enterprises should be undertaken, in order to reapply the advanced technologies to other fields of economic activity, such as specialized agricultural technologies, telecommunications equipment, and pharmaceutical and medical equipment, among others. The optimum production would be that which is both beneficial for Moldova's development, but also marketable internationally.

During this period of privatization and economic reform, there is the potential for highly technical industrial operations to be restructured into basic production factories. Already, former defense plants with highly technical capacities -- including the Mezon, Semnal, Sigma, Topaz, Micron, and Raut enterprises -- have been restructured to produce metal gates, doors, fences, safes and pots, and in the process, have lost their capacity to produce the highly specific electronics for which they were designed. In order to prevent the loss of the nation's highly specific and valuable industrial technology, it is essential that stipulations be placed on the privatization of these highly technical industries, in order to prevent the loss of the nation's advanced industrial potential, including the destruction of unique technological equipment and capacities<sup>5</sup>.

Moldovan enterprises should seek to advance -- not limit or undermine -- their technological potential. In order to promote this development, the government should provide incentives for the development,

manufacture, and transfer of advanced technological innovations. In addition, the Moldovan Government and private enterprises should seek technical assistance and educational/training opportunities from abroad in order to further develop the capacity of the industrial sector.

## Energy Reform

Moldovan industry, on the whole, is highly inefficient with regards to energy consumption; a typical Moldovan industrial plant uses 400% to 500% of the energy used in Western Europe to produce a similar product. This situation is compounded by the fact that Moldova, with the exception of the energy produced by its one hydroelectric plant, is forced to import nearly 100% of its energy resources from abroad. In order to lessen industrial energy demands, reform is currently underway -- through the reformulation of industrial designs, the creation of new technologies, and the re-education of engineers. Moldova plans to reduce its energy consumption by 50%.

## Research and Development

An invaluable legacy from the Soviet era in Moldova is the republic's strong scientific research and development capacity, represented by the National Academy of Sciences and its affiliate bodies. The most effective and Moldova-appropriate strategies and means for the achievement of national development will originate from this intellectual base. Current investments in Moldova's future -- particularly international economic credits (which over the last decade have amounted to US\$605 million) -- are chiefly channeled towards the development of industry, agriculture, privatization and energy reform. It is essential that a portion of these resources also be directed towards the maintenance and development of the nation's scientific base, particularly towards the funding of research and



development projects<sup>6</sup>. Such investment in the intellectual basis of the nation will serve as an investment in the nation's future development.

Since Moldova's acquisition of independence, the financing of research has been slashed (from 0.44% of GNP in 1990 to 0.2% in 1994). Taking into account that GNP itself has declined significantly since independence, the true financial crisis is in this field significantly worse than a 50% cut in financing.

This funding reduction has resulted in the wide scale emigration of scientists seeking better remuneration and better working conditions; the Academy of Sciences alone has lost 460 research associates and more than 100 doctors since independence. For those who remain, the budget cuts have resulted in the reduction of skills, due to lack of educational/training opportunities, the drastically reduced resources with which to work, and the technological obsolescence of national scientific facilities. (In the National Academy of Sciences, for example, 76.7% of the equipment is over 7 years old. Only 1.7% of the equipment is less than 5 years old.)

Unless urgent reform actions are taken, the loss of scientists to emigration, *on* the one hand, and the drop in students entering scientific fields, on the other (largely the result of poor remuneration and low motivation for entering scientific professions), will lead to the significant decline in Moldova's scientific potential.

In order to promote the role of science in Moldova, research activities must be oriented toward the urgent needs of the national transition process. Such activities highly appropriate for the nation's successful economic and social transformation, include the following:

- Pharmaceutical development: Moldova is undergoing clinical tests on the newly developed anti-cancer drug "setrimed" and the antidepressant "citazie" and the

*Science is a unique field of activity which, along with working for the present, probes the future, establishes prerequisites for this future, and traces the means for the development of society, and its material and spiritual progress...Advantaged nations, in the future, will not be countries with the largest volume of mineral resources, but those characterized as having the highest level of knowledge. It is for this reason that science and scientific research are of decisive importance....*

*Mr. Andrei Andriesh  
President, Moldovan Academy of  
Sciences*

cardia drug "maloben". Another 10 new are in development -- in antibacterial and antiviral fields.

- Textile and plastics dyeing: The Institute of Chemistry has created new dyeing catalysts to reduce chemical consumption, to double labour productivity, and to reduce environmentally harmful waste.
- Microbiologic biotechnologies: Research is ongoing to control the synthesis of bioactive substances by microorganisms, in order to produce products beneficial in the food, agricultural, medical and zootechnical industries.
- Transportation: Efforts are underway to increase fuel efficiency and reduce elimination of wastes from combustion engines.

In general, the priorities of Moldova's scientific community during this period of transition are aimed at achieving practical interventions for assisting Moldova in achieving its economic development. The main priorities of Moldova's scientists are in the fields of: renewable resources, energy efficiency, technology enhancers.

From the above description of the capacity of Moldova's scientific community, it is



evident that the nation's scientific potential can contribute greatly to the nation's transition and development process. It is essential that the Government recognize the significant role of the nation's scientific bodies, built up during the Soviet era, and that this strong intellectual and development potential not be lost during this transition era, but instead called upon to assist the nation in achieving economic and human development.

### **A Plan for International Assistance**

A third essential asset required by Moldova in its efforts to achieve successful transition and, ultimately, sustainable human development -- in addition to a strong economic programme and a strong intellectual/scientific resource base — is external developmental assistance. Sound investments in the nation's development - in the form of technical, humanitarian and financial assistance -- will support Moldova through and beyond its transition period.

International assistance to Moldova in 1994 consisted of the following: a Systemic Transformation Facility Loan and a Stand By Loan provided by the International Monetary Fund, and a Drought Relief and Programme Rehabilitation Loan provided by World Bank valued at approximately US\$300 million; humanitarian assistance grants from the European Union, France, Germany, Italy, Japan, the Netherlands,

Romania, Turkey, and the United States, totaling approximately US\$26 million; emergency humanitarian assistance totaling US\$12.3 million, and technical assistance from the United Nations and other organizations in the form of free standing technical cooperation (US\$31.2 million), and investment related technical cooperation (US\$2.9 million).

In 1994, the Moldovan Government established the Department for External Aid Coordination, under the auspices of the Ministry of Economy. This newly established managerial body has increased the government's capacity to manage and coordinate its international assistance - whether in the form of development loans, emergency relief, grant or technical assistance — and to more efficiently evaluate the success of the assistance programmes. The United Nations Development Programme provides assistance to the development of this Department, through a US\$900,000 project "Strengthening the National Capacity for External Resources Management."

With proper investment in Moldova's transition, the financial and technical resources will serve to enhance the nation's existing intellectual and human capacity, and provide a mechanism for Moldova to implement its sustainable human development strategy.



# Human Development Indicators for Moldova

The significant number of missing statistical indices unavailable for the completion of this section of the National Human Development Report is an indication of the developmental needs of the Department of Statistics of the Republic of Moldova. A first step in pursuing sustainable human development is the quantitative determination of specific areas of development need; this, in turn, requires the support of the national statistical bodies -- in this case of the Department of Statistics. As demonstrated herein, international support is required to increase the capacity of the Moldovan department of statistics in the collection and analysis of Human Development Indicators (HDIs), and to assist the Department in establishing a HDI statistic collection system which is based on internationally-recognized standards. In undertaking such standardization, the Department of Statistics will increase the transferability of its statistical data to foreign nations and international organizations, thus increasing Moldova's capacity to communicating the extent of its economic and social development to foreign nations and international organizations

Assistance to the Department of Statistics in Moldova will be provided by the United Nations Development Programme in the fields of national accounts (to assist Moldova in the more accurate calculation of its GDP) and gender statistics (to introduce a quantitative methodology for assessing gender equity in the Republic.)

### *Trends in Economic Development*

Final GNP		GNP Per Capita Annual Increase		Average Annual Inflation Rate (%)		Exports (% GNP)	Income from Tax Collection (% GNP)	Direct Taxes (% of all taxes)		General Excess/Budget Deficit (% GNP)	
Billion US\$	Annual Increase (1991-1993)	1965-1980	1991-1993	1980-1991	1992	1980-1991	1980-1991	1980	1991	1980	1991
...	-17.65	...	-17.65	...	1109	...	...	32.7	31	...	

### *National Items of Revenue*

Final GDP (Millions of Roubles) 1991	Agricultural Production (% GDP) 1991	Industry (% GDP) 1991	Services (% GDP) 1991	Consumption (% GDP) 1991		General Inland Investments (%GDP) 1991	General Inland Savings (% GDP) 1991	Income from Tax Collection (% GDP) 1991	Central Government Expenditures (% GDP) 1991	Exports (%GDP) In Actual Prices	Imports (% GDP) In Actual Prices
				Private	State						
25895	...	...	...	...	...	...	...	...	0.9	32.3	34.1

### *Balance of Natural Resources*

Total Area (TA) (Thousands of km <sup>2</sup> )	Density of Population (Persons per km <sup>2</sup> )	Arable and Constantly Sewn Areas (% of TA)	Evergreen Meadows (% of TA)	Woods and Forest Plantations (% of TA)	Irrigated Soils (% of all Arable Areas)	Inner Renewal of Water Resources per Head of Population (per 1000m <sup>3</sup> /year)	Annual Consumption of Water	
							% of Water Resources	Per Captita (m <sup>3</sup> )
33.8	128	53	10.4	9.6	16.4	...	99	863

### *Military Expenses and Uneven Use of Resources*

Military Expenses (% GDP) (real price)		Military Expenses (% of expenditures for education and medical care) (real price)		Average Yearly Export of Non-Atomic Weapons to Developing Countries		Military Forces		
1960	1990-91	1960	1990-91	US\$ 1988-92	% of National Export 1991	Per 1000 People 1990	Per 1 Teacher 1990	Per 1 Doctor 1990
...	4.7	...	68.7	...	...	...	...	...

## Unemployment

Number of Unemployed (thousands) 1992	Rate of Unemployment					Expenses for Paying Unemployment Compensation 1991	Long-Term Unemployment		Disparity of Unemployment in the Region (25% of the worst compared to 25% of the best) 1989 (by districts)	Correlation of Unemployment with Incomplete Secondary Education and Complete Higher Education	
	Total 1992	Total, including those hopeless to find a job 1992	Women 1990-1991	Youth (15-24) 1992	Young Men 15-19 (1992)		More than 6 Months	More than 12 Months		Men 1989-1990	Women 1989-1990
2019	0.1	...	...	...	...	...	...	...	...	...	...

## Employment ( in industry )

Labour Force (% of total Pop.)	% of Workers Working in:			Correlation of Future Replaced Manpower 1992	Yearly Growth of Income per Worker (%) 1980-1990	Disparity of Income: Correlation between Upper and Lower Segments of Workforce		% Workforce Participating in Trade Unions	Work Hours Per Week (Per Industrial Worker) 1989-1991	Expenses of Programmes Dealing with the Labour Market (% GDP) 1990-1992
	Agriculture 1990-1992	Industry 1990-1992	Services 1990-1992			1980-1981	1990-1991			
42	35	21	...	148	...	...	...	...	34	...



## Medicine and Health Protection

Years Lost Due to Untimely Death (per 1000 persons) 1990	Deaths From Wide-spread Diseases (% of Total Deaths) 1990-1991	Death from Malignancies (% of Total Deaths) 1990-1991	AIDS (per 100,000 persons) 1992	Consumption of Hard Liquor (Liters per adult) 1986-1991	Consumption of Tobacco (Kg. per adult) 1985-1991	Number of Patients per Doctor 1990	Medical Services Paid for by Social Insurance Services (%) 1991	State Expenses for Health Protection (% of total state expenses) 1989-1991	Total Expenses for Health Protection (% of GDP) (in real prices)		Private Expenses for Health Protection (% of total health expenses) 1989-1991
									1960	1991	
19	42	13	...	10.92	1.55	250	...	10.8	...	2.3	...

## Demographics

Population (millions)			Yearly Population Increase (%)		Index of General Fertility 1992	Index of Fertility Over Time (1992 as % of 1960)	Use of Contraceptives (%) 1985-1992	Number of Dependent Relations (%) 1992	Population Over age 60 1992 (percent)	Anticipated Remaining Lifespan at Age 60 (# of Years)	
1960	1992	2000	1960-1992	1992-2000						Men 1989-1990	Women 1989-1990
3	4.4	4.6	12	0.7	2.2	...	...	56	13	15.5	18.4

## *The Situation of Women*

Expected Lifespan at Birth (in Years) 1992	Average Age at First Marriage 1980-1990	Maternal Mortality Rate (per 100,000 deliveries) 1988	Entering Secondary Educational Institutions (%) 1990	Graduation with Complete Secondary Education (% women of normal graduation age) 1991	Entering Higher Educational Facilities for Full Time Study (%) 1991	Entering Higher Educational Facilities to Study Natural and Applied Sciences (% of women from Higher Education) 1990-1991	Female Labour Force (% of total workforce) 1991	Administration and Management (% of Women) 1980-1989	Parliament (% of Seats Held by Women) 1992
72	...	35	...	...	...	...	...	59	...

## *Human Development Tendencies*

Anticipated Duration of Life at the Moment of Birth (years)		Index of Higher Education for Full Time Education (%)		Real GNP Per Capita (US\$) (in current prices )		GNP Per Capita (US\$)		General Education Expenses (% of GNP) (in current prices )		General Expenses for Health Protection (in current prices )	
1960	1992	1965	1991	1961	1991	1976	1991	1960	1991	1960	1991
...	68	...	...	...	2398	...	...	...	4.6	...	2.3

## Human Crises

Unemployment Rate		Adults With Less than Secondary Education (% population aged 15-64) 1991	Correlations between Incomes, if 20% and 40% work done in the Home 1980-1991	Salaries of Women (% of Salaries of Men) 1990-1992	Average Yearly Inflation Rate (%)		Years Lost to Untimely Death (per 1000 people) 1990	Injuries from Traffic Accidents (per 100,000 people) 1990-1991	Deliberate Murders Committed by Men (per 100,000 men) 1985-1990	Reported Cases of Rape (per 100,000 women) 1989	Evaporation of Sulfur and Nitrogen (kg NO <sub>2</sub> and SO <sub>2</sub> per capita) 1989	
General 1992	Youth 1991-1992				1980-1991	1992					NO	SO <sub>2</sub>
0.1	...	40	...	...	...	1109	19	...	...	14.8	10	55

## Human Development

Anticipated Duration of Life at the Moment of Birth 1992	Maternal Mortality (per 100,000 live births) 1988	Number of Patients per Doctor 1990	Scientists and Technicians (per 1000 people) 1988	Number of Persons Having Entered Educational Institutions (% aged 6-23) 1991	General index of Persons Entering Higher Education		Daily Newspapers (copies per 100 individuals) 1990	Televisions (per 1000 individuals) 1991	Real GNP per Capita 1991 (rubles, real prices )	GNP per Capita (US\$) 1991
					Total (%) 1991	Women (%) 1991				
68	35	250	...	...	...	...	55	27	2398	...

## Indexes of Human Development

Anticipated Duration of Life at the Moment of Birth 1992	Level of Adult Literacy (%) 1992 according to 1992 census	Length of Education 1992	Index of Literacy	Index of Education	Level of Education 1992	Real GNP Per Capita (Roubles in real prices) 1991	Corrected Real GNP Per Capita (Roubles)	Index of Human Development	Level of GNP Per Capita
68	96.4	6	0.96	0.4	2.32	2398	...	0.714	6



# Bibliography

The following informational resources were drawn upon in the preparation of this first National Human Development Report for Moldova.

1. Analysis of Transition in Europe and Central Asia: Study of the Republic of Moldova, United Nations Development Programme/Moldova, Chisinau, February 1995.
2. Andriesh Andrei. Science for Sustainable Human Development, Academy of Sciences, Chisinau. February 1995.
3. Bostan Ion. Industry and Technological Education: Two Ways to Achieving Sustainable Human Development, Chisinau Technical University, Chisinau. February 1995.
4. Bucun Nicolae & Gutsu Vladimir. Education in the Context of Sustainable Human Development. Ministry of Education of the Republic of Moldova, Chisinau, February 1995.
5. Chiobanu Victor. Human Resources and the Labour Market in the Republic of Moldova, Academy of Sciences, Chisinau. February 1995.
6. Chebotaru Ion. Concept of Sustainable Human Development and Its Application in the Transition Period of the Republic of Moldova, National Institute of Ecology, Chisinau, February 1995.
7. Chirca Sergiu. Main Trends in the Development of the Republic of Moldova, and Their Influence on the Human Factor, Academy of Economic Studies, Chisinau. February 1995.
8. Corbu Haralambie. Spiritual Culture as the Most Important Condition for Sustainable Human Development, Academy of Sciences, Chisinau. February 1995.
9. Dediu Ion, Iacovlev Vladimir, Chebotaru Ion. Environmental Protection in the Context of Sustainable Human Development in the Republic of Moldova, National Institute of Ecology, Chisinau. February 1995.
10. Development Cooperation Report: Moldova, United Nations Development Programme/Moldova, Chisinau, February 1995.
11. Fandofan Sergiu. Environmental Protection in the Republic of Moldova: Achievements, Problems and Outlook, Department of Environmental Protection, Government of the Republic of Moldova, Chisinau, February 1995.
12. Gudym Anatol. Economic Reform: Opening to the World and Achieving Stabilization, Ministry of Economy of the Republic of Moldova, Chisinau, February 1995.
13. Hrishchev Eugen. Management and Human Development, Academy of Economic Studies, Chisinau. February 1995.
14. Human Development Report 1991, United Nations Development Programme, New York, 1991.
15. Mihailov Eugenia. Popular Social Protection in the Republic of Moldova During the Period of Transition to a Free Market Economy, Ministry of Labour, Social Protection and Family, Chisinau. February 1995.
16. Radaustanu Sergiu. High Technologies and Industry: The Problems of Human Development and Migration, Academy of Sciences, Chisinau. February 1995.

17. Roshca Alexander, Zavtur Alexander. Social Policy and Sustainable Human Development in the Republic of Moldova, Academy of Sciences, Chisinau. February 1995.
18. Rusu Alexei. Strategy of Development and Reform of the Health Care System in the Republic of Moldova as a Factor of Sustainable Human Development, Ministry of Health of the Republic of Moldova, Chisinau, February 1995.
19. Sishcan Nadejda. Concept of Human Development in the Republic of Moldova, Academy of Economic Studies, Chisinau. February 1995.
20. Sishcan Nadejda. The Status of Women in the Republic of Moldova, Academy of Economic Studies, Chisinau. October 1994.
21. Studies Formulated by Moldovan Consultants: Volume I, United Nations Development Programme/Moldova, Chisinau, September 1993.
22. Studies Formulated by Moldovan Consultants: Volume II, United Nations Development Programme/Moldova, Chisinau, November 1993.
23. Studies Formulated by Moldovan Consultants: Volume III, United Nations Development Programme/Moldova, Chisinau, January 1994.
24. Studies Formulated by Moldovan Consultants: Volume IV (Unpublished), United Nations Development Programme/Moldova, Chisinau, October 1994.

Specific endnote references within the text are as follows:

#### Chapter 1 & 2:

1. Hrishchev Eugen. Management and Human Development, Academy of Economic Studies, Chisinau. February 1995.
2. Sishcan Nadejda. Concept of Human Development in the Republic of Moldova, Academy of Economic Studies, Chisinau. February 1995.
3. Roshca Alexander, Zavtur Alexander. Social Policy and Sustainable Human Development in the Republic of Moldova, Academy of Sciences, Chisinau. February 1995.
4. Dediu Ion, Iacovlev Vladimir, Chebotaru Ion. Environmental Protection in the Context of Sustainable Human Development in the Republic of Moldova, National Institute of Ecology, Chisinau. February 1995.

#### Chapter 3

1. Sishcan Nadejda. The Status of Women in the Republic of Moldova, Academy of Economic Studies, Chisinau. October 1994.
2. Chirca Sergiu, Main Trends in the Development of the Republic of Moldova, and Their Influence on the Human Factor, Academy of Economic Studies, Chisinau. February 1995.
3. Roshca Alexander, Zavtur Alexander. Social Policy and Sustainable Human Development in the Republic of Moldova, Academy of Sciences, Chisinau. February 1995.
4. Ibid.



## Chapter 4

1. Studies Formulated by Moldovan Consultants: Volume II, United Nations Development Programme/Moldova, Chisinau, November 1993.
2. Sishcan Nadejda. Concept of Human Development in the Republic of Moldova, Academy of Economic Studies, Chisinau. February 1995.
3. Chirca Sergiu, Main Trends in the Development of the Republic of Moldova, and Their Influence on the Human Factor. Academy of Economic Studies, Chisinau. February 1995.
4. Corbu Haralambie. Spiritual Culture as the Most Important Condition for Sustainable Human Development, Academy of Sciences, Chisinau. February 1995.
5. Rusu Alexei. Strategy of Development and Reform of the Health Care System in the Republic of Moldova as a Factor of Sustainable Human Development, Ministry of Health of the Republic of Moldova, Chisinau, February 1995.
6. Dediu Ion, Iacovlev Vladimir, Chebotaru Ion. Environmental Protection in the Context of Sustainable Human Development in the Republic of Moldova, National Institute of Ecology, Chisinau. February 1995.