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Chapter 12: MOLDOVA

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NCSEER NOTE

This report is part of a Council-funded research project entitled Environmental Resources and Constraints in the Former Soviet Republics. Twenty one reports, listed below, resulting from this project will be distributed seriatim by the Council, and will collectively become the chapters of a book to be published in 1994 by Westview Press. Eighteen of the 21 (written by other authors) deal with the fifteen former republics, and three (written by Dr. Philip R. Pryde, the Principal Investigator) are summarizing reports.

Chapter 1: The Environmental Implications of Republic Sovereignty. (Pryde)
Chapter 2: Russia - An Overview of the Federation. (Pryde)
Chapter 3: European Russia. (Kochurov)
Chapter 4: The Urals and Siberia. (Scherbakova & Monroe)
Chapter 5: The Russian Far East. (Strand)
Chapter 6: Estonia. (Sooin)
Chapter 7: Latvia. (Dreifelds)
Chapter 8: Lithuania. (Kritkauskys)
Chapter 9: Ukraine. (Stebelsky)
Chapter 10: Environmental Management in Ukraine. (Freeman)
Chapter 11: Belarus. (Cherp & Kovaleva)
Chapter 12: Moldova. (Dinu & Rowntree)
Chapter 13: Georgia. (Richards)
Chapter 14: Armenia. (Valesyan)
Chapter 15: Azerbaijan. (Wolfson & Daniell)
Chapter 16: Kazakhstan. (Smith)
Chapter 17: Turkmennistan. (Micklin)
Chapter 18: Uzbekistan. (Lubin)
Chapter 19: Kyrgyzstan. (Bradyn)
Chapter 20: Tajikistan. (Eicher)
Chapter 21: The View to the Future. (Pryde)
Executive Summary

The following paragraphs summarize the main contents and conclusions of a chapter on Moldova, which has been prepared as part of a larger work on the environmental and economic-geographic situation in each of the former Soviet republics. The full study, edited by Philip R. Pryde, will be published by Westview Press under the title "Environmental Resources and Constraints in the Former Soviet Republics. Funding assistance from the National Council for Soviet and East European Research is acknowledged with appreciation.

In this chapter, the history and ethnography of Moldova is briefly summarized, followed by a survey of its biotic and agricultural resources. It has few environmental constraints to its economic development. The contemporary state of the development of industry and agriculture within the republic is reviewed, with a focus on the environmental disruption that has resulted from this development. The current situation with regard to biotic preservation is noted, including the establishment of nature reserves and parks. The administrative structure for environmental management within the country is also briefly examined, as are non-governmental environmental efforts.

Particular discussion is directed to the problems that currently exist within Moldova from agricultural operation, air pollution, and deteriorated water bodies. The difficult political situation in the Trans-Dniestr region is also reviewed.

The future of Moldova is necessarily unclear at present, as it tries to establish a separate identity amidst efforts both to align it more closely to Romania to the west, and to the Slavic peoples and nations to the east. Its development is hindered by a lack of both energy resources and a direct access to the ocean. The Trans-Dniestr conflict must be resolved for internal stability to be achieved.

Philip R. Pryde, June 6, 1994
Chapter 12. MOLDOVA

Adriana Dinu and Matthew Rowntree

The independent Republic of Moldova presently consists for the most part of the old Moldovan republic of Bessarabia, which was created by Romanians in 1359, together with a narrow strip of former Ukrainian territory east of the Dnestr River (locally called the Nistru River), which was annexed in 1940 (see Figure 12.1).

Moldova has an area of 33,700 km\(^2\) and a 1992 population of 4,359,100, of which 3,900 km\(^2\) and a population of 600,000 lie in the trans-Dnestr region. It was the second smallest of the former Soviet states. Moldova is situated between Romania to the west and Ukraine to the north, east and south. Chisinau (Kishinev) is the capital, Romanian the national language, and Eastern Orthodoxy the dominant religion. It became a member of the Council on Security and Cooperation in Europe on 30 January 1992 and of the United Nations on 2 March 1992.

History and Demographic Characteristics

Being strategically positioned, Moldova was fought over and fragmented by the great imperial powers of Austria, Russia and Turkey for much of its history. In 1484, the southern region of Bessarabia was given to the Turks. In 1600, Milhai Viteazu combined the countries of Valachia, Transylvania and Moldova to form a united Romania. After the Russo-Turkish war (1806-1812), Russia annexed 44,500 km\(^2\) of Romania, east of the River Prut. Following the Paris treaty of 1859, Moldova regained Bessarabia, but later lost it again to Russia in 1912. In January 1918, following the collapse of tsarist Russia, Bessarabia declared its independence from Russia when it was named the Democratic Republic of Moldova and was united with Romania in March of that year (Nistor, 1991).

The Soviet republic of Moldova was created by Stalin in 1939 under the Molotov-Ribbentrop pact. It includes the former Romanian provinces of Bessarabia and Bukovina and former Ukrainian territories to the east of the Dnestr River which were exchanged for Moldovan territories to the south of the Republic. By creating a new republic and concentrating the industrial centres in the Russian speaking, former Ukrainian territory of (trans-) Dnestr, Stalin was able to gain greater control over the Moldovans by reducing their population majority, increasing their dependence on the Ukrainian dominated areas for power and industrial produce and undermining future territorial claims by Romania (Fleck, 1991). Stalin further strengthened his hold on Moldova by making Russian the official language, thereby favoring ethnic Russians for government positions. Stalin is also blamed for allowing a series of famines with the result that close to one million Romanians were displaced between 1940 and 1964. Many of these people were replaced with immigrants from Ukraine and Kazakhstan (Nistor, 1991).
The "glasnost" period leading up to the collapse of the USSR in December 1991 generated new feelings of ethnic identity among the Moldovan people. In August 1989, the Moldovan government adopted a law reinstating Romanian as the official language and in August 1991 declared its independence from the Soviet Union.

The population of Moldova reflects its turbulent past, with its mixed ethnic composition of nearly 4.4 million. Included in this number are about 3 million Romanian-Moldovans (64%), over 1 million Russians (13%) and Ukrainians (13.8%), over 150,000 Gagauz (3.5%, these are Turkish Christians) with the remainder being Jews, Bulgarians, and others (see Table 12.1). The country experienced a 10% population growth rate between 1979 and 1989 with Kishinev, the capital, accounting for 655,000 people (15.4% of the total population) at the beginning of 1989. According to the 1989 census there were 2.06 million males and 2.27 million females; of the total population 46.5% were classified as urban. Moldova is divided into 40 administrative districts and four major urban centers: Chisinau (Kishinev), Tiraspol (182,000 population in 1989), Balti (Beltsy, 159,000), and Tighina (Bendery, 130,000).

Ethnic tensions have increased since 1990. Among Romanian-Moldovans, the Russian and Ukrainian population has become increasingly unpopular as a result of past privileges and are now considered foreigners. Further antagonism has developed as the Russian and Ukrainian majority in the province of Dnestr in eastern Moldova seeks independence as the Soviet Socialist Moldovan republic of Transdnestria (or the Dnestr republic). This is partly in response to having failed to gain support from Russia or Ukraine to form an autonomous state within either of them (Fleck, 1991). The nationalism expressed by some of the majority of the Ukrainian and Russian residents of Transdnestria is becoming increasingly significant in the region's future; they have already used their industrial and transport advantages to blockade the rest of Moldova. Civil disputes and unrest in the region's capital, Tiraspol, as well as in Dubasari (Dubossary) and Tighina, resulted in a state of emergency being set up in the summer of 1990 and 20 deaths in Tiraspol in March 1992. Ethnic Romanians are also being encouraged to leave some towns, particularly Tighina, 20 km to the west of Tiraspol on the Dnestr river. The Gagauz population is also becoming unpopular as they too seek an independent state in the south of Moldova.

Physical and Biotic Environment

Moldova is a relatively flat country, with one third covered by plains (the North Moldova Plain or Baltului Steppe, and the South Moldova Plain or Buceagului Steppe) and fluvial terraces. It has a mean height of 147m above sea level and a maximum height of 429m in the central part of the country. The territory has been classified into nine geomorphological regions from north to south and three natural zones: forest, forest-steppe and steppe. The steppe region is in places broken by rugged rock outcrops (Figure 12.2).
Table 12.1 Characteristics of Moldovan Population, 1989

<table>
<thead>
<tr>
<th>Nationality Background</th>
<th>1000 People</th>
<th>% of Country</th>
<th>Urban % of Ethnic Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romanian</td>
<td>2794.7</td>
<td>64.5</td>
<td>33.5</td>
</tr>
<tr>
<td>Ukrainian</td>
<td>600.4</td>
<td>13.8</td>
<td>63.1</td>
</tr>
<tr>
<td>Russian</td>
<td>562.1</td>
<td>13.0</td>
<td>86.1</td>
</tr>
<tr>
<td>Gagauz</td>
<td>153.3</td>
<td>3.5</td>
<td>41.2</td>
</tr>
<tr>
<td>Bulgarian</td>
<td>88.4</td>
<td>2.0</td>
<td>45.5</td>
</tr>
<tr>
<td>Jewish</td>
<td>65.8</td>
<td>1.5</td>
<td>99.2</td>
</tr>
<tr>
<td>Other</td>
<td>70.8</td>
<td>1.7</td>
<td>68.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4335.4</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data adapted from Soviet Geography, April 1991, p. 228.
Figure 12.2. An area of steep, eroded rocky outcrops in the north Moldovan steppe region near the city of Edinetz. Photo courtesy of Dr. P. Cocirra.
The region's climate is semi-arid and continental with little snow and a mean winter temperature of -3°C in the south and -5°C in the north during the coldest month (January) and a summer mean of 22°C in the south and 19.5°C in the north during the hottest month (July). The mean annual rainfall is 400–500 mm, with most precipitation falling between April and October. Rainfall does, however, tend to be sporadic and droughts occur three years in ten.

Moldova was originally covered by steppe vegetation in the south and broadleaf forest in the north and sustained fauna representative of eastern Europe, the Balkan peninsula and the Black Sea's north shores. However, economic development and exploitation has led to a widespread reduction in the country's biodiversity, particularly with reference to steppe and wetland habitats. Furthermore, in 1989, the USSR State Committee on Nature Protection reported that there was no natural landscape remaining in Moldova (Mnatsakanian, 1992), presumably meaning landscapes unmodified by human activity. Forests, however, do cover 243,100 ha, or 7.2 percent of the country, although there is a high incidence of tree damage (IUCN-EEP, 1991; Pryde, 1991, p. 114).

The country, moreover, still retains 260 bird, 80 fish, 400 other vertebrate species and 4,500 invertebrate species, although these numbers continue to decrease. Between 1900 and 1950, eight bird species were recorded as no longer occurring in Moldova, including the Dalmatian pelican (*Pelecanus crispus*), the black vulture (*Aegypius monachus*) and the steppe eagle (*Aquila rapax*) (Tarabukin, 1978). In 1990, there were 8 mammal, 17 bird and 4 reptiles species listed as protected; this number is expected to increase, especially for fish species, as over-fishing and hydrotechnical works at Stinca Costesti has prevented fish from entering the Danube-Prut system.

Two state nature preserves were designated during the 1970s, the Kodry State Zapovedniki (5,177 ha) and the Redenskiy Les hunting preserve (5,664 ha). Together, they cover 0.32% of the country and contain samples of middle European forest, dominated by species of oak and acacia. These reserves are primarily preserved as "scientific institutions ... and studied for their natural complexes, and are established on land excluded from economic utilisation" (IUCN-EEP, 1990). In 1988, the smaller Yagorlyk Zapovednik was created. By 1989, 11 nature sanctuaries or partial reserves called zakazniki (two zoological and 9 botanical) had been designated, which cover 3,200 ha, in addition to the two Zapovedniki and one hunting preserve noted above. These are statistically summarized in Table 12.2.

Being relatively flat and well drained, Moldova has no topographical constraints to development. The climate permits 2 to 3 agricultural crops per year, but the country is relatively poor in metallic and petrochemical deposits. Although Moldova is currently self-sufficient in steel, it lacks many other essential metals for development. Unless further reserves of coal and oil can be found, Moldova will continue to have an energy deficit (Turnock, 1980).

Moldova receives a total of 13.6 billion m³ of water annually, with 657 km of the Dnestr river providing 56% of the country's needs and 695 km of the Prut river providing 16%. But despite its 3,200 water courses, there are occasional water shortages due to low precipitation and high
### Table 12.2: Preserved Areas in Moldova

<table>
<thead>
<tr>
<th>Type of Preserve (a)</th>
<th>Number</th>
<th>Total area (b)</th>
<th>Average size (b)</th>
<th>% of Republic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zapovednik</td>
<td>2</td>
<td>60.77</td>
<td>30.39</td>
<td>0.18</td>
</tr>
<tr>
<td>National Parks</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Zakazniki</td>
<td>11</td>
<td>32.00</td>
<td>2.91</td>
<td>0.09</td>
</tr>
<tr>
<td>Hunting preserves</td>
<td>1</td>
<td>56.64</td>
<td>56.64</td>
<td>0.17</td>
</tr>
</tbody>
</table>

Total: 14  149.41  10.67  0.44

(a) For the definition of each type of preserve, see Appendix 2 to Chapter 1.
(b) In square kilometers.


Zapovedniki (date created): | Hectares:
---|---
Kodry (1971) | 5177
Yagortyuk (1988) | 900

Total: 6077
evaporation rates. These shortages lead to occasional crop failure and rivers drying up (the 1992 drought caused an estimated 40 billion rubles worth of losses). When flash flooding does occur, it results in erosion of agricultural areas with landslides and the formation of gullies.

**Agriculture and Industry**

Moldova’s natural productivity is due largely to its rich agricultural soils, with chernozems covering 69% of the country. Agriculture accounts for 24% of Moldova’s gross national product and 34% of the work force. 95% of the country is under active economic development, with 2.5 million ha or 74% of the country dedicated to agriculture (Mnatsakanian, 1992). Of this, 1.8 million ha is under arable production, 408,600 ha is under plantations and 350,000 ha is under pasture and hay fields. Crops produced include wheat, tomatoes, potatoes, tobacco, cucumbers and grapes, with the latter forming half of the 200 food processing enterprises in the country. In addition to wine grapes, Moldova is also noted for its extensive orchards, which are located mainly on the fertile fluvial terraces. Moldovan wine is considered to be quite good.

In the past, much of Moldova’s agricultural produce was exported to other regions of the former USSR at very low prices, and the land was over-worked. As a result, there has been extensive soil degradation resulting from careless cultivation and contamination with agricultural chemicals (IUCN-EEP, 1991). Only 20-25% of the total arable land now has a humus content greater than 3%, and large areas of the country are becoming increasingly susceptible to erosion. The dependence on agricultural chemicals has decreased since the late 1980s, though this might partially be caused by shortages of supplies or money. Agriculturalists and distributors still have to reduce the post-harvest loss, which is estimated at 60%, in order to make their operations more efficient (Berry, 1992). In the future, there is potential for Moldova to combine with Romania to form an “agricultural super-power,” providing food for European as well as former Soviet countries.

Moldova is further favored with extensive deposits of high quality construction rocks, clay, gravel, limestone, and sands, as well as small deposits of brown coal, oil, and iron ore that were discovered after 1948 (Turnock, 1980). Over 35 million tons of minerals are extracted annually, with operations based on 98 open cast mines and 16 underground mines. However, increasingly large areas of arable land are being destroyed as a result of these extraction processes and it is likely that conflicts between the needs of agriculture and mineral companies will become more significant in the near future.

A large proportion of Moldova’s industry was created during the 1950s and now accounts for over half of the gross national product. Over one third of the total industrial production is based on the food industry and over half of these companies are associated with viniculture.

One third of the industrial production and 80% of Moldova’s energy capacity, however, is made in or controlled from the Dnestr region (EE Newsletter, 1992), including metal and cement works in Ribnita (Rybnitsa) and hydroelectric plants in Dubasari. If the Transdniestra region were to be
declared independent, the opportunities for Moldova’s future growth would be severely constrained and dependent upon retaining economic links with the Dnestr region or establishing and developing trade and energy agreements with neighboring states, particularly Romania.

Moldova also contains over 260 large and 400 small intensive livestock farming enterprises. However, their current operation is making a significant contribution to the environmental degradation experienced in Moldova, as over 40 million m$^3$ of wastes are produced each year (Asevskii, V. 1989), polluting both water and air with nitrates and ammonia.

**Major Environmental Problems**

Like many of the former Soviet republics, Moldova has experienced wide-scale, intensive, rapid and unsustainable development. Air, soil, and water pollution is common and is the attributed cause of Moldova’s high incidence of abnormal births, infant mortalities, and lowered mental abilities (Observer, 15 Jan., 1989; Ziegler, 1992, p. 27, and Feshbach and Friendly, 1992, p. 67).

Air pollution is particularly common in large towns and cities such as Balti (Beltsy), Ribnita (Rybnitsa), Chisinau (Kishinev) and Tiraspol. Most of this pollution is caused by vehicles with 76.2% of the 132,000 tons of pollution emitted in Chisinau during 1988 coming from vehicles (Mnatsakanian, 1992, p. 37). Over half of the pollution from stationary sources comes from energy generating complexes. The giant regional coal-burning power plant near Dnestrovsk accounts for 53% of all pollution from stationary sources, in part because it increased output following the Chernobyl disaster of 1986. Most of this pollution is in the form of SO$_2$ and particulates (dust) (see Table 12.3). In addition, further pollution has resulted from accidents, such as at the weapons manufacturing complex at Tighina (Bendery), when explosions at a biochemical plant released ammonia and chlorine gasses. National air pollution levels are monitored by fourteen stationary and five mobile stations.

After the Second World War, the Soviet leadership encouraged the exploitation of agriculturally rich republics, such as Moldova, to feed other areas. Small farms were converted into state and collective farms and saturated with agricultural chemicals to increase production and reduce pest damage.

Between 1965 and 1989, the average mineral fertilizer use increased from 28 kg/ha to 196 kg/ha. From 1967 through 1986, Appendix 12.1 shows that the average application of pesticides in Moldova was over 17 kg/ha, more than ten times the average in western countries. Pesticide use in Moldova was thirteen times higher than even the USSR average (Feshbach and Friendly, 1992, p. 67). Although Moldova’s dependence on chemicals has been reduced and experiments with biological pest control have proved successful, food and soil contamination is still extensive, with 25% of the food produced in 1990 found to be polluted with nitrates. Furthermore, DDT is still found in soils in concentrations up to 9.2 mg/Kg (Mnatsakanian, 1992, p. 41), even though it was officially banned in the USSR in 1970. High concentrations of the herbicides Simazine and Atrazine are still found in soils, although their concentrations are decreasing (IUCN-EEP, 1991).
Table 12.3  Atmospheric Emissions in Moldova, 1989 (1000 tons)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Total Emissions</th>
<th>Emissions from Stationary Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emissions %</td>
<td>Sources %</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>544.6</td>
<td>48.6</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>237.8</td>
<td>237.8</td>
</tr>
<tr>
<td>Hydrocarbons</td>
<td>112.2</td>
<td>9.5</td>
</tr>
<tr>
<td>Nitrogen Oxides</td>
<td>82.8</td>
<td>45.8</td>
</tr>
<tr>
<td>Dust</td>
<td>79.5</td>
<td>79.5</td>
</tr>
</tbody>
</table>

Further soil degradation has occurred due to a decline in the country’s soil-humus content, causing the soil structure to weaken. One quarter of the arable land in Moldova suffers from water erosion and 28% of the arable land is subject to deflation (wind erosion). It is estimated that 18 million tons of topsoil erode annually from Moldova’s arable land, equating to a loss of 1 ton/ha per year (Mnatsakanian, 1992, p. 41).

Moldova’s third major environmental problem is based on its difficulty in securing perennial supplies of potable water, and reducing the pollution levels in existing supplies. Only 8% of Moldova’s water comes from aquifers and only 50% of this can meet Soviet drinking standards. Many of the wells near major cities are drying up and many of the rural wells are contaminated with high mineral concentrations and bacterial counts.

Moldova’s water pollution stems from both point and non-point sources, with the dominant point sources being industrial, municipal and sanitary waste sites, and livestock farms; with agricultural chemicals, wastes, and soil erosion being the major non-point sources. During 1986, 13 million m$^3$ of untreated water were discharged into the Dniestr basin, and in 1989 this rose to 21 million m$^3$ (including 610 tons of petroleum products and 19,000 tons of organic compounds (IUCN-EEP, 1989). In addition, over 8 million m$^3$ of water are used annually in the management of wastes from livestock farms, much of which seeps back into water systems, contaminating supplies with nitrates, parasite eggs and pathogens.

Much of the water pollution caused by agriculture is derived from nitrates and soils that are washed directly into adjacent rivers. The Prut and Dniestr river valleys are under extensive agricultural production, and have little or no vegetation to intercept chemical-rich water and soil once the harvest has taken place. The river Reut, in an area dominated by agriculture in the north and center of Moldova, had pesticides in 95% of its water when sampled in 1990, and also contained high concentrations of ammonia and nitrogen (IUCN-EEP, 1991). Further contamination results from the direct run-off of used irrigation water, which contains both agricultural chemicals and salts.

Serious water pollution has occurred on the Dniestr river as a result of damage to a dam and the non-operation of the sewage works at Dubasari, following civil disturbances.

**Government Structure and Citizen Activism**

Moldova’s environmental policies remain a legacy of the former Soviet government, although the new State Department for Environment and Natural Resource Protection (formed in July 1990) is in the process of drafting new laws and has had exclusive control over natural resource administration and nature preservation since October 1990. The new laws will be divided into three components: a) the use and protection of the environment, b) the Republic of Moldova State Department for Environment and Natural Resource Protection, and c) the Ecological Fund of Moldova. They must be approved by the Ecological Commission of the Parliament of Moldova.
The State Department for Environment and Natural Resource Protection has 2,921 employees, including 1,720 members of the Forest Directorate, 521 members of the Ecological Inspectorate, 405 members in the hydrometeorology division, 185 members of the National Ecological Institute and 90 employees at the department’s central office.

As with many other former Soviet republics, non-governmental organizations (NGOs) and citizen activist movements were banned in Moldova by the ruling Communist Party and had no influence in government programs until the end of the 1980s. However, in November 1988, a Moldavian Green Movement was set up by Chisinau intellectuals. Although originally opposed by the government, it was able to draw attention to some of the environmental problems caused by agriculture, power generation, and the pollution of the Prut river. A second NGO, the Ecological Movement, became affiliated with the Moldavian Popular Front which subsequently gained control of the Supreme Soviet, an action that led to the declaration of independence from Moscow (Ziegler, 1992, p. 28).

Non-governmental organizations are developing in Moldova, although many currently lack basic communication and management skills. The Ecological Movement and the Green Party have, however, developed public awareness and education programs in the mass media, published their own journal, "Ave natura", organized lessons in schools, and arranged scientific expeditions. They have also developed links with Romania and Ukraine for international research projects in the Dniestr and Prut river basins.

External Ties and Economic Potential

Moldova is still dependent on the former states of the USSR as markets for its goods, although it is apparent that there is considerable potential to develop links with Romania and, through better management programs, become a major European source of agricultural produce. Commodities such as Moldovan wine could potentially become major export items. Furthermore, Romania may be able to provide Moldova with the energy and raw material supplies that are required for future growth, and this in turn could be a step in the direction of a potential reunification.

However, at present Moldova is still highly dependent on the Dniestr province, and authorities in Tiraspol have, in the recent past, used sanctions on the rest of Moldova to protest the arrest of the Dniestr republic’s president, Igor Smirnov (Fleck, 1991). Dniestr holds considerable advantages when negotiating terms and conditions for future trade and transport agreements with the rest of Moldova as they control most of Moldova’s power and transport capacity. Perhaps in reflection of this, former Communist officials did well in the February, 1994, national elections; candidates favoring reunification with Romania did not. As has been mentioned above, Moldova’s industrial development will also be limited by the availability of energy resources even if Dniestr officials do not impose sanctions, as their current energy budget runs at a deficit (Turnock, 1980). Energy production will be
further restricted if international environmental legislation imposes penalties on severely polluting countries, like Moldova, that still rely on inefficient factories and power generating plants.

Opportunities for the development of Moldova's tourism potential may be restricted due to its relative lack of beaches and outstanding scenery. However, its pleasant climate, historic thirteenth and fourteenth century towns, and abundance of vineyards could be the basis for establishing and developing a potentially thriving tourist industry, assuming a peaceful resolution to current ethnic disagreements.

1 The assistance of the East European Programme of the World Conservation Union (IUCN), and of its personnel in Cambridge, UK, Gland, Switzerland, and Bucharest, Romania, is gratefully acknowledged.
Bibliography


