

III. TRANSITION AND ITS SOCIAL COSTS FOR CHILDREN

A. CHILDREN AND THE COSTS OF TRANSITION

1. Many Costs of Transition

Independence and the difficult transition to market-based economies in Central Asia have led to complex problems that were not even contemplated before 1990. Economic and fiscal crises have resulted in tremendous strains on society and the family while public resources have diminished. Children and young people are severely affected by their parents' struggle during this transition and by the ongoing deterioration in former public support mechanisms. Some of the negative developments that most closely concern children are:

- The incidence of poverty has increased with children in large families and those with special needs facing desperate circumstances. Household poverty has been exacerbated by the decline in social and infrastructure services that had previously cushioned the impact of relatively low incomes in the Soviet Union.
- The labor markets are developing, however, because of the five-year depression, there is only a weak demand for labor. Older firms need to retrench and new firms have yet to establish a significant presence. Unemployment, unknown in these countries before independence, has emerged as a serious problem, particularly for young people.
- The central planning collapse has ended subsidies that had previously supported social infrastructure ranging from child care facilities to transportation systems to municipal services

including district heating. This extensive infrastructure has deteriorated with failing service provision and increased costs. These changes exacerbate the impact of other economic problems, particularly increasing the impact of poverty on families and children.

- The education system is faltering with kindergartens and pre-school facilities closing. School systems are not able to pay staff and teacher salaries, conduct routine maintenance, or invest in new curriculums in order to reorient the system towards the emerging needs of the new economic system.
- The social support mechanisms such as free school meals have ended. Coupled with growing household poverty, hunger is becoming a recurring problem among the countries' poor, especially in remote areas.

Photo 4: Children Bear the Costs of Transition



- The health system too is deteriorating. Hospitals and health care lack financial support and medicines and other supplies are often unavailable. As a direct consequence of reduced health care, increased poverty, and less healthy living conditions, infectious diseases such as tuberculosis have reappeared, especially among children and their mothers. The deteriorating conditions in the health sectors mostly affect children and mothers; child and mother mortality rates have been increasing.
- The social safety net, including social protection and social insurance payments, has collapsed. The loss of this widespread support for families and the declining real value of public transfer payments have eroded the living standards of children.

2. Restructuring and Social Costs

The problems noted above reflect the ongoing economic restructuring of the economy as it moves from a command-based system to a system operating on market principles. Social costs directly result from (i) the reduction in employment as the large state enterprises and farms increase productivity; (ii) the deterioration in the previously extensive social infrastructure systems such as district heating and transportation; (iii) the decline in the provision of social services especially health and education; and (iv) the decreased social assistance and weakened social safety nets. Reflecting the long depression in economic activity, the social costs have touched nearly everyone. The burden has been especially severe for certain vulnerable groups, including many children.

An important aspect of economic restructuring has resulted from the privatization or transfer to private ownership of former state assets. Privatization was a natural consequence of the collapse of central planning and, in the long run, will lead to a viable private sector. These privatization activities have been accomplished in several ways. Most of the countries' housing stocks have, for example, been transferred to private ownership. The privatization of other small assets, trade outlets, small farms, and service establishments has similarly largely been completed. Formal progress has also been made in many medium- and large-scale enterprises by reorganizing them as joint-stock companies (corporatized). However, substantive change (that results in

commercially-oriented behavior by firms) for these larger enterprises has been minimal, partly as a result of the lack of market-oriented labor and managerial skills.

The immediate impact of this economic restructuring has not been favorable for children and young people:

- Within the long depression, privatization has decreased formal employment for young people. Young people are newcomers on the labor market, lacking the seniority of the established workers and the skills needed for newly developing opportunities. They face a slack labor market with high barriers.
- As part of the divestiture process privatizing enterprises has resulted in the closure of many social assets for children such as kindergartens and after-school facilities. This has reduced services for children and also family employment opportunities. Jobs traditionally reserved for women in social service provision have been disappearing as a consequence of the collapse of central planning and the difficult transition period.
- Previously subsidized activities by enterprises such as the free provision of heating fuel and reliable public transportation for children and schools have ceased with the end to subsidies from Moscow. At a time when family income has been falling, this has reduced real living standards, in some instances, with serious consequences such as poorer health conditions and less frequent attendance at school.
- The lack of viable restructuring by firms has also reduced the tax or revenue base for the governments. This, coupled with the loss of pre-independence budget subsidies from Moscow, has resulted in declining social assistance and transfers, including those directed at children.

In summary, in the long-run, economic restructuring offers the potential for a more efficient economy. In theory, many services formerly supplied under central planning (services extended by an economy now incapable of sustained operations) will be provided by the developing private sector or by a rationalized public sector. This

will improve the situation of children and the populace in general. However, in the meantime, the public and non-governmental sectors are still too fragile to provide services previously supplied by the large state enterprises.

B. INCREASING POVERTY AND INEQUITY

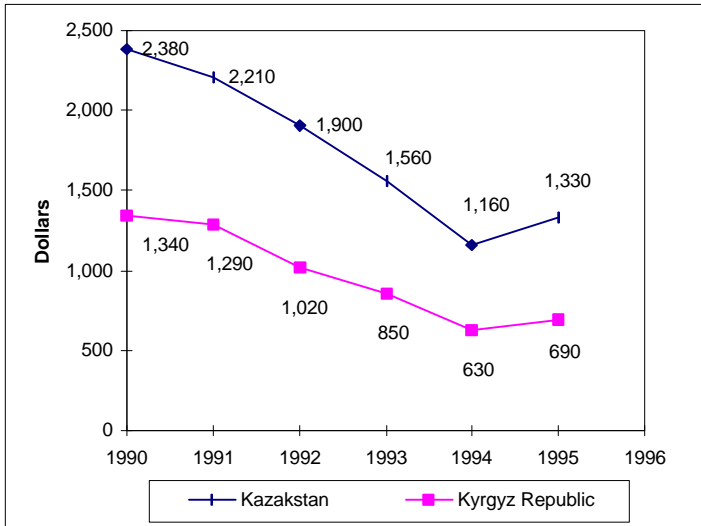
1. Economic Depression Accompanied Independence

Immediately following independence in 1991, a five-year depression gripped Kazakstan and the Kyrgyz Republic with national output and income declining by roughly one half. This depression resulted directly from the breakup of the system of central planning in the former Soviet Union. Firms and farms had been designed to satisfy the needs of an autarchic command economy in isolation from world markets and world prices. Energy products, capital goods, and transport services were heavily subsidized, resulting in widely dispersed, capital intensive facilities that were inefficient by world standards.

With independence for the various new republics, this complex system was disrupted; there was a sharp decline in trade between the new republics, a breakdown in the interrepublican payments systems, and an opening of domestic markets to competition from non-former Soviet Union countries. The aggregate decline in GDP between 1991 to 1996 was 56.4 percent in Kazakstan and 47.9 percent in the Kyrgyz Republic. There does appear to be an end to the output contraction in both countries and small positive growth was recorded for 1996. Sustainable growth of a magnitude to redress the recent fall in personal income, however, remains uncertain (Graph 4).

The depression resulted in enormous social costs, most specifically in an increase in the incidence of poverty and a general decline in living standards. Some groups of people and some regions have suffered proportionally more than others. Moreover, there is a growing inequality in bearing the costs of this transition in a society accustomed to relative equality in living standards. Rural areas are generally poorer than the urban areas. Fiscal imbalances developed as the transfers from Moscow to the Central Asian regional governments ceased and as the large state enterprises' outputs contracted. Thus, at a time when public assistance is critically needed, there are fewer resources to bring to bear on problems such as poverty alleviation, the provision

Graph 4: Falling National Income
(GNP per capita)



Note: Data are from the World Bank. The Atlas methodology is based on a three-year average of inflation adjusted exchange rates. The estimates are biased by the use of the official ruble-dollar exchange rate before the introduction of the national currencies in Kazakstan and Kyrgyzstan.

Source: World Bank, ADB

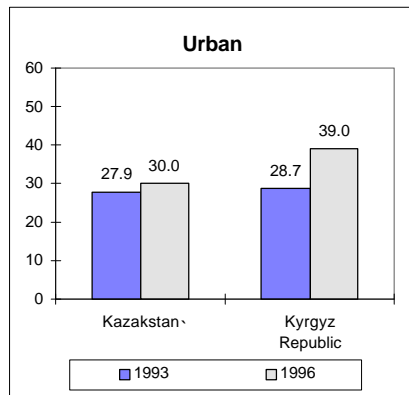
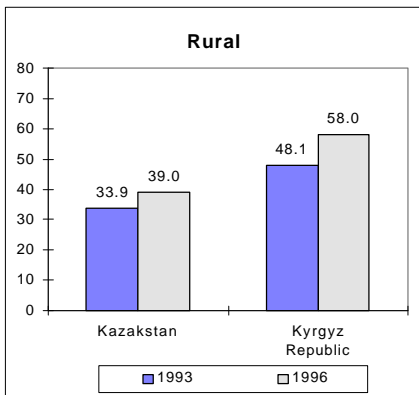
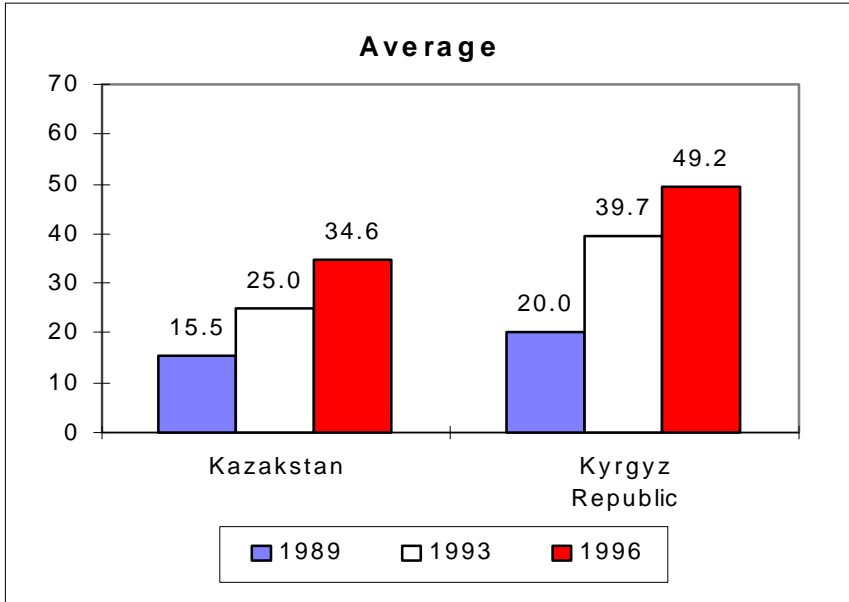
of social services, and infrastructure rehabilitation. Severe rural poverty is exacerbated by the faltering provision of public services that has had a particular impact on access to education and health services for the rural poor (see Chapter IV).

2. Increasing Incidence of Poverty

To provide for measures of the incidence of poverty that are comparable across countries, the World Bank uses a poverty line of \$4 per day per person for Central Asian former Soviet Union Republics (in 1990 purchasing power parity terms).¹ Using this poverty line, the World Bank estimated the 1996 incidence of poverty in Kazakstan at 35 percent and in the Kyrgyz Republic at 49 percent (Graph 5). In the

¹ In contrast, the figure suggested for OECD countries is \$14.40 (in 1988 prices and exchange rates) and \$1 for developing countries.

Graph 5: Rising Poverty in Kazakstan and the Kyrgyz Republic
(percent of households living below the poverty threshold)



Source: National Statistical Committees, World Bank; based on a comparable \$4 per day per person poverty line in 1990 prices

poorer rural areas, 50-80 percent of the population is thought to be below this poverty line. This compares to an incidence of poverty before independence of 15-20 percent; a poverty cushioned by comprehensive state- and enterprise-financed social safety nets.

Estimates of the incidence of poverty depend on the methodology used to construct the poverty line and on measures of household welfare. The Statistical Committees in the two countries, for instance, base their estimates of the incidence of poverty on an assumed minimum per capita expenditure or minimum consumption level (MCL) necessary for sustaining existence. For the Kyrgyz Republic, the MCL in 1996 was set at Som 534 (approximately \$30) per month per person and Som 312 (\$17.4) per child. Based on this line, in 1996, 70-80 percent of the population and 60 percent of the children were living below the poverty line.¹ In Kazakhstan, the MCL in 1996 was fixed at Tenge 2,700 (\$ 37) and more than half of all people and 40-50 percent of the children were thought to be living below this level (Graph 6). For comparison, in the Russian Federation, UNICEF estimated that 62 percent of children were living below the poverty line in 1992, up from 40 percent in 1989.²

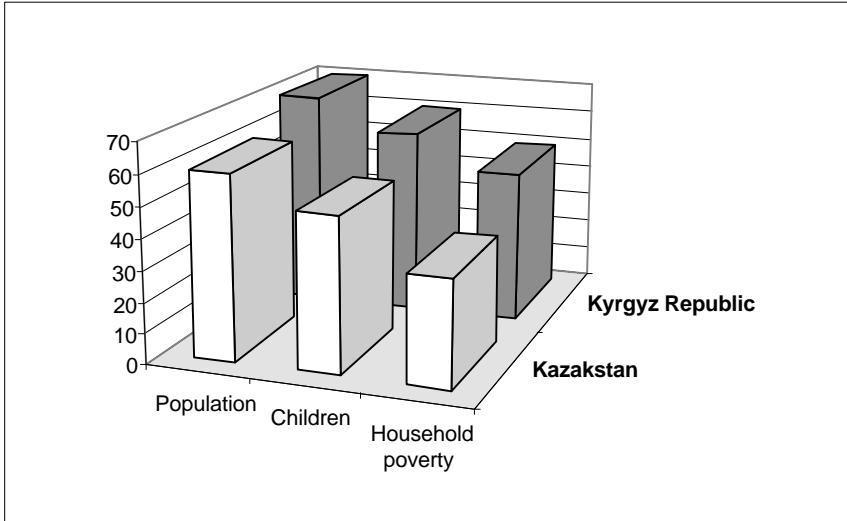
Although detailed information about the poor is just emerging from recent survey work, there is considerable evidence that some groups of individuals have suffered more economic distress than others. Ethnic Kazak and Kyrgyz children tend to be poorer than those of other ethnic backgrounds because they are more likely to live in the poorer rural areas and in bigger families. Among those children especially vulnerable to the difficult economic conditions are orphans, the handicapped, those with special care needs, and young people in company towns (Chapter V).

As a result of growing poverty, households are increasingly spending a larger share of their income on food. The share of food in total cash expenditures for an average household increased from 32 percent for Kazakhstan and 40 percent for the Kyrgyz Republic in 1989 to 48 percent in 1994 in Kazakhstan and nearly 60 percent in mid-1996

1 These estimates of the incidence of poverty are not the official figures used by the respective Governments. The official poverty estimates ranged in 1996 between 15-20 percent of all households. The official estimates are issued by the Ministries of Labor and Social Protection and use lower poverty lines than those used by the National Statistical Agencies. The official poverty standards correspond approximately to those used by the World Bank to define and measure *severe* poverty.

2 The poverty threshold for children is set by UNICEF at 60 percent of the income of an adult and is comparable to the estimates by the State Statistical Agencies.

Graph 6: Children Living Below the Minimum Consumption Level in 1996
 (children and population as percent of total;
 household poverty as percent of total households)



Sources: National Statistical Committees

in the Kyrgyz Republic. Apart from food, an increasing share of income is being spent on heating, education, and medical care. Before 1993, these services were free of charge or provided by enterprises or the state for a nominal fee. The net impact of these changes is often less food and nutrition for children (Chapter IV.B.2) and a greater likelihood that the immediate environment for children is harsher and less supportive of their health and developmental needs (Chapters IV.B and V.B.).

3. Decreasing Equality in Sharing the Burden of Transition

With rising poverty, rural families find many aspects of life more challenging than their compatriots in the cities (Table 2). Schooling, for one, is more difficult in the rural areas. As a result of a lack of heating or transport, schools in the rural areas tend to be closed more than urban schools. In remote rural areas it is very expensive to transport children to their schools and provide sufficient heating. The budgets of the rural local governments often do not provide sufficient

funds to maintain the school system that, in the Soviet era, provided roughly equal facilities even in remote, under-populated regions. Family poverty means there is sometimes a lack of adequate winter clothing for children of poor rural families and this also discourages attendance during the long winter months (see below). In Naryn, the most remote oblast of the Kyrgyz Republic, the number of school dropouts increased by 35 percent between 1991 and 1994. In contrast, the school dropout rate actually decreased in the capital Bishkek by 34 percent during the same period.

The issue of adequate winter clothing and shoes for children has been consistently reported since independence as a major problem affecting school attendance. For example, in 1994 in Bel-Aldei Raion of Jalal-abad Oblast in the Kyrgyz Republic, it was reported that children from 18 of 28 households surveyed did not attend school due to the lack of winter clothing and shoes. In oblasts such as Naryn in the Kyrgyz Republic, where the winter is six to seven months long, clothing for most low-income families is threadbare and inadequate.¹

The Deputy Akim of Naryn Oblast in the Kyrgyz Republic suggested, in an interview in May 1996, that there was a polarization occurring in which the wealthy were able to send their children to good schools, while the rest of the population received poor-quality education or, in the extreme, did not receive any. Most of the students, for instance, at the new private colleges and universities came from well-to-do families who could afford the tuition and other expenses. The same was true for preschool education. In the Kyrgyz Republic the Government has recognized that even public schools are relying to an increasing extent upon user-fees (Chapter IV.A). Charges for services such as transport or school meals have been discouraging attendance by poor children.²

Increasing poverty and a failing social safety net have combined to produce many obstacles to the education of poor children. A similar story could be told about access to health services. As detailed later

1 In response to some aspects of this issue, the Kyrgyz Government is considering reintroducing the mandatory use of school uniforms. This would, it is thought, minimize social differences between poor and better-off households. However, it may become an additional obstacle to education for poor children without public assistance to purchase school uniforms. According to official statistics, the cost of a school uniform in 1996 ranged between Som 250-350, no small sum for poor families with many children.

2 With assistance from the Asian Development Bank, the Government of the Kyrgyz Republic is planning to introduce an education fund in 1998 that will attempt to redress some of the inequitable aspects of user-fees or charges.

Photo 5: Rural Child with Grandmother in a Kyrgyz Yurt



(Chapter IV.B and IV.C), independence and the ongoing transition to a market-based economy have weakened the socialist legacy of equal access for all to public services. Social indicators show particularly severe changes in rural areas (Table 2).

C. PROBLEMS IN THE LABOR MARKET

The general economic problems and specifically the need for restructuring for firms and farms have introduced the peoples of Central Asia to problems not seen during the Soviet era. Growing unemployment and weak labor markets are the principal elements for increasing family poverty and complicate the problems of young people as they plan their education and leave school.

Table 2: Growing Rural – Urban Inequity in Child Development

	Before transition (1989-91)			During transition (1995-96)		
	Urban	Rural	Average	Urban	Rural	Average
Population						
Children (percent of total population)	25	40	32	22	27	31
Children aged 0-4 (percent of total population)	25	40	12	22	27	9
Average number of children per family	2.2	3.4	2.9	1.8	2.8	2.5
Youth unemployment (percent of total unemployed)	0	0	0	45	40	35
Health						
Infant mortality	30	33	32	30	43	38
Undernourished children (percent of children aged 1-5)	3	4	4	6	10	9
Education						
Access to kindergarten (percent of children)	60	42	50	50	30	27
School dropouts (percent)	1	5	3	5	35	15
Student/teacher ratio (general schools)	n.a.	n.a.	11	n.a.	n.a.	15
Schools being heated (percent)	95	90	92	65	40	50

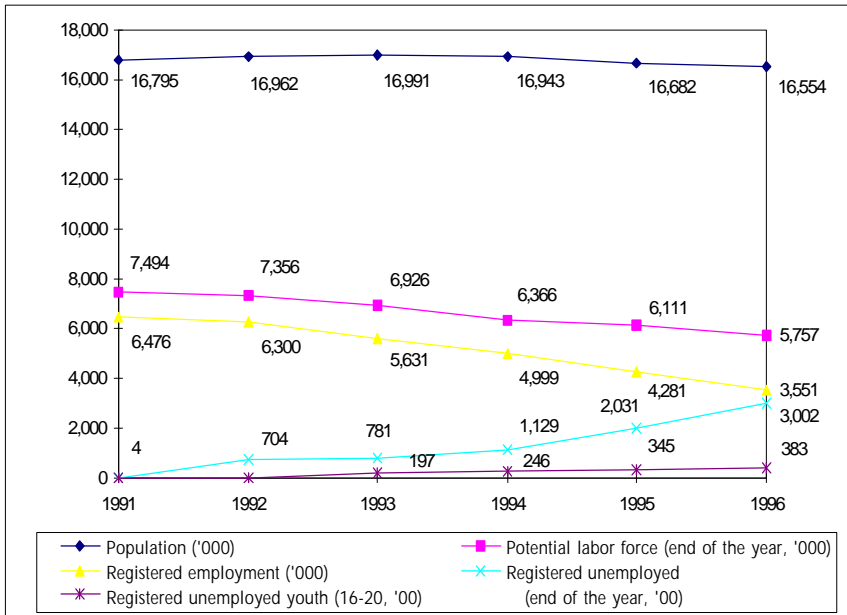
Notes: (a) Data are for 1990 and 1995; (b) Data are for 1989 and 1995; (c) Data are for the school years 1990-91 and 1995-96; (e) Data are for school years 1990-91 and 1995-96; (f) Data are for school years 1990-91 and 1995-96; n.a. = data not available

Sources: Statistical Committees, Ministries of Education, Health, Labor and Social Protection

1. Weak Labor Markets; Growing Unemployment and Falling Real Wages

The economic decline and industrial restructuring since independence have resulted in massive unemployment in a society accustomed to full and lifetime employment. In mid-1997, over 13 percent of the Kazak labor force and more than 20 percent of the labor force in the Kyrgyz Republic were without full-time work; a sharp change from the negligible unemployment before independence.¹ Open (registered) unemployment, at approximately 4 percent of the economi-

Graph 7: Labor Markets in Kazakhstan
(end of the year)



Note: Data on the numbers of unemployed are in hundreds of people, the other measures are in thousands.

Sources: Ministry of Labor and Social Protection, Goskomstat

1 The definitions of unemployment differ between the two countries. In particular, the definitions used in Kazakhstan likely result in a lower estimate of unemployment than do those used in the Kyrgyz Republic. Moreover the data for Kazakhstan were revised at the beginning of 1996. The revision has lowered the overall estimate of unemployment, making data for 1995 and earlier inconsistent with recent figures.

cally active population of both countries, is still relatively low, but likely to increase as enterprise restructuring continues. The remainder of the unemployed are "hidden," maintaining some formal connection with a firm or farm but without full-time work and often without wages, although some benefits such as housing may be maintained. As a result of the general economic weakness, labor force participation is declining. In Kazakhstan for example, the economic difficulties have reduced the work force engaged in the registered economy from 6.5 million in 1990 to 4.3 million at the end of 1995 (Graph 7).

In the former Soviet Union wages were low, but were supported by a comprehensive system of transfers, social security, and special allowances. Non-monetary income, including inexpensive access to housing, health facilities, kindergartens, transport, and public utility services, was estimated at over 40 percent of total labor compensation. This situation was supported by a complex system of implicit and explicit subsidies from Moscow; a system that proved unsustainable after independence. With independence and the concurrent deteriorating economy, incomes declined dramatically with real wages falling by more than one half in Kazakhstan. In the Kyrgyz Republic real average wages in 1995 were only 35 percent of the 1991 levels. The rural sector has been particularly hard hit as wages in the agriculture sector in 1996 were roughly one half the average for the whole economy.

The real decline in income is exacerbated by wages often being paid months in arrears. Wage arrears in Kazakhstan, for example, amounted to \$0.6 billion in mid-1996, and in the Kyrgyz Republic by mid-1996 payments for pensions and other transfers were on average six months in arrears. Reflecting the difficult position of enterprises, wage payments are also often made in-kind and not in cash; especially in rural areas. In many cases, commodity wages in-kind provide little real benefit to the worker.

2. Youth Unemployment

Unemployment was not common for young people in the former Soviet Union; schooling and employment were provided as a matter of course under central planning. Since independence, the governments' commitment and public assurance of employment for young people have evaporated amid the economic difficulties.

Photo 6: Youth in the Emerging Informal Sector

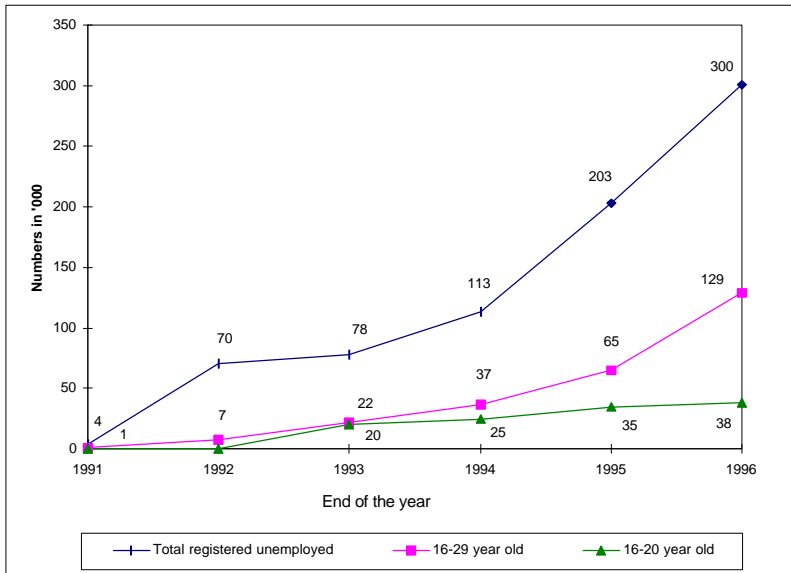


In Kazakhstan, young people (16-29 years) accounted for 54 percent of the officially registered unemployed in 1993. The share of total unemployed represented by young people decreased slightly by 1996, to 46 percent, but this was due to increased registration of other groups rather than any improvement in the situation for young people. Particularly worrisome is the growing number of people below 20 who are leaving school yet not finding work (Graph 8). In Kazakhstan, in 1996, young people below 20 accounted for approximately 15 percent of registered unemployment.

The situation is poised to worsen. In Kazakhstan, each year 60,000 graduates from special secondary schools, 75,000 from technical and vocational schools, 30,000 from higher education institutions, and an increasing part of the 120,000 general secondary school graduates enter the labor market.¹ In the smaller Kyrgyz Republic, every year about 50,000 students leave school; many of them with scant prospects for full-time employment. Both countries will experience a growing youth unemployment problem over the next 5-10 years, when the 30-40 percent of the population that is now made up of those under 18, enter the labor force.

¹ Special secondary schools provide for specialized technical training.

Graph 8: Registered Unemployment among Young People in Kazakstan



Source: Ministry of Labor and Social Protection

The ongoing process of privatization and restructuring is likely to aggravate the current problem of unemployment for young people. Factory managers interviewed during field studies for this report expected decreasing employment in their enterprises. Moreover, they indicated more of a willingness to retain skilled workers and those workers with family obligations; all considerations leading to increased unemployment for young people.

The situation is most severe in certain regions or localities, for example, in the rural areas and company towns in Kazakstan. In interviews with three factory managers (representing both state-owned and private firms) in the rural company town of Tekeli in south-eastern Kazakstan, none suggested that they were planning to hire a significant number of young people. In the city's largest industry, the lead and zinc combine, the total number of employees dropped more than 30 percent from around 3,300 in 1993 to less than 2,300 in 1996. The number of employees below 20 years of age decreased from 80 to 20 during the same time. As young people are the most mobile part of the labor force, in places like Tekeli, migration is one solution. During the last three years out of a total population of 28,000 about 4,000

workers have left the town. According to officials most of them are young people.

Under current economic conditions, unemployment tends to be a long-term problem for many individuals. For the unemployed young the situation leads to considerable frustration. Socially, unemployment aggravates existing problems including the increasing fragmentation of families, alcoholism, crime, and suicide. These specific social problems are discussed later, especially in Chapter V.

3. Collapsing Vocational Education System

A particularly difficult set of issues concerns the breakdown of the vocational training system, which formerly fed students to the large state farms and firms. Since independence, the total number of young people that could be employed by large enterprises has fallen rapidly. While in 1990 in Kazakstan employment could be arranged for nearly 95,000 graduates of vocational schools, in 1994 this number dropped to less than 65,000. The number of students sent to work on the large state farms in Kazakstan dropped by more than 50 percent since independence (Table 3).

Table 3: Jobs for Graduates from Vocational Schools
(in '000)

	1990	1992	1993	1994
Total number of graduates from vocational schools	112.9	96.1	85.6	79.1
Number of graduates sent to work at enterprises by sector				
Industry	94.8	80.7	71.6	64.8
Agriculture	22.6	22.4	19.5	18.8
Construction	44.8	30.9	28.9	21.6
Transport	9.3	9.7	8.5	7.7
Communication	2.0	3.3	2.7	2.9
Trade, Canteen	1.4	1.0	0.9	1.1
Housing and municipal services	5.8	6.4	4.9	4.3
Percent not finding employment	6.4	4.0	4.0	3.7
	16.0	16.0	16.4	19.1

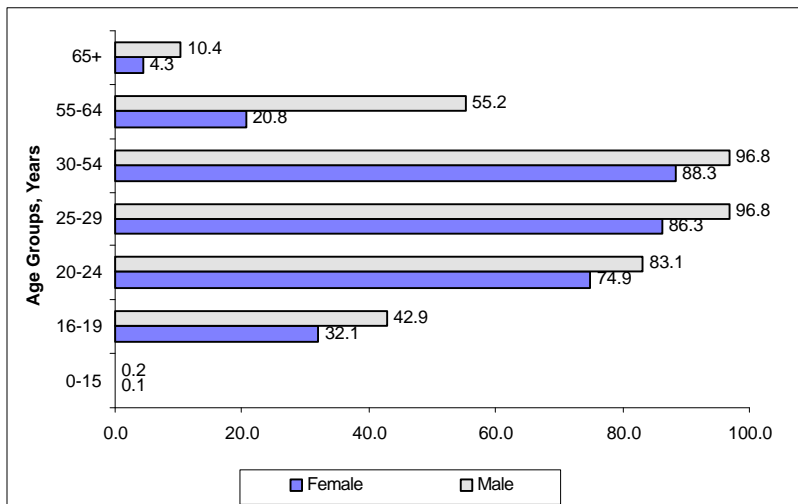
Sources: Goskomstat, Ministry of Labor and Social Protection

A number of factors have led to the declining utility of the vocational education sector. Declining employment in the former state enterprise sector is the overwhelming problem. However, fundamentally, the vocational education system is not prepared to train young people in the skills now needed by the new market economy. The system is still largely training for positions needed under the former command economy, based on state enterprises. Skills training generally is yet oriented towards obsolete Soviet technology and management practices and ignores new needs for business skills such as marketing, designing, and accounting.

4. Increasing Importance of Family Labor

In Soviet times, the labor market was regulated and informal sector activities other than for the family or the community were forbidden. Children and young people did participate in agricultural and *dacha* (gardening) work. Their help was, however, not usually critical in sustaining family living standards. Other than this, child labor was not prevalent during Soviet times. Labor and family laws protecting children were enforced.

Graph 9: Gender Issues in Labor Force Participation in Kazakhstan
(percent of population, by gender and age, participating in the registered labor force, 1994)



Source: Ministry of Labor and Social Protection

With respect to gender, there was a tendency for boys to enter the labor force at an earlier age than girls. Equivalently, girls tended to stay in school longer than boys. The earlier retirement ages for women also tended to pull women out of the labor force at an earlier age than men. Overall, however, in both Kazakhstan and the Kyrgyz Republic, there was generally high participation in the work force by both men and women (Graph 9).

The social and economic difficulties after independence pressured young people to enter the labor market at an early age to support their families. In cities, children render assistance in the service sectors, particularly by helping in bazaars. In remote rural areas, boys drop out from schools to help their parents on farms. A survey among women in urban trade in Almaty, conducted in June 1996 in conjunction with the Bank's gender study on Kazakhstan, revealed that the majority of market women were helped by family members, usually by their children. The same may be true for families who operate private farms in the countryside. A growing number of children must support themselves. Homeless or abandoned children, not seen during Soviet times, are increasingly obvious in the larger urban centers (Chapter V.B.)

Many children are at risk. Especially in the rural areas, children have less time to attend to schooling and study. When children start to work at a young age and for too many hours, when work conflicts with schooltime and playtime, the situation becomes exploitative

Photo 7: Child Absent from School



and results in diminished human development. Given the norms of the Central Asian societies, with the "first call" historically given to children, the situation illustrates the enormous strains on the family. With the lack of employment, declining income, growing poverty, and diminishing public assistance the family is forced to make do with fewer resources. Children are being called to work, unable to develop their own potential.¹

5. Special Problems in Company Towns

Developments in company towns are of special concern. In most of these medium-sized urban centers, constructed during Soviet times, more than three-quarters of the population and two thirds of the urban utilities and social services depend on the economic performance of one or two large-scale enterprises. With the breakup of the former Soviet Union and the loss of input supply and markets, most of these specialized company towns face severe social and economic problems. There are some 50-60 company towns in Kazakstan and unemployment in many of these centers reached 50 percent or more by 1996. Further depressing welfare, wage and pension arrears exist, often for more than 6 months. With diminished enterprise funding, urban infrastructure and social service facilities (including schools and health centers) are rapidly deteriorating. There are shortages of electric power, district heating, and water. The sewage system and public transport are degenerating. It is expected that continued restructuring may result in higher unemployment and social hardships, especially in those towns characterized by extreme product specialization.

Company towns are also noted as environmental problem areas. Soviet environmental policies were extremely lax. Industries were, for example, generally responsible for regulating themselves. The result was in many instances horrible pollution problems, in some cases outright catastrophes (a discussion on the Aral Sea is in Chapters III.E and IV.B). Air and water pollution and solid waste problems in company towns are serious enough to lead to widespread health problems especially for children. In Jambyl, in Kazakstan, the incidence of spontaneous abortion, attributed to environmental pollution, is 12.5 times higher

1 It should be noted that the traditional subsistence nomadic economy involving animal herding has always involved work by young people. The current situation, though, has little to do with a revival of ancient traditions and is more a reflection of the breakdown in family, community, and public support systems.

than in the country as a whole. The incidence of environmental-related diseases including tuberculosis (TB) is generally believed to be much higher in company towns than for the nation as a whole.

Children are particularly affected by these developments. In earlier times, most of the childcare facilities were provided by companies. They have now been shut down due to lack of funds. In the Kazakstan company town of Janatas, for example, out of the former 20 kindergartens, 14 are standing idle (Chapter IV.3.).

As a result of the lack of economic opportunities many people emigrate. In Kazakstan's company town Tekeli, for example, a considerable part of the working population, mostly men and young people, has left. The population of the town is rapidly getting older.

Under the current system, there is little economic future for young people in company towns. It is virtually impossible to find employment. At the same time, the majority of teenagers and young adults is ineligible for unemployment benefits or other social protection transfers. As a result of the high incidence of poverty and deteriorating social services and social assistance, families lack resources to help these young people. Large-scale emigration has, in many cases, further reduced support for young people by weakening extended family ties.

6. Active Labor Market Policy Missing

Reflecting in part the Soviet legacy, but also the new governments' attempts to deal with the emerging social problems represented by youth unemployment, there are special labor laws relating to youth. In Kazakstan, for example, since 1991, large enterprises have been obliged to employ a certain percentage of persons who are facing difficulties in finding employment. Hiring is mandated under a quota system for different groups, among them young people under 20. Well meaning as these regulations may be, they are a clumsy way of dealing with an evolving labor market problem. Officials admit that these regulations are increasingly difficult to implement and are not currently enforced (except for provisions covering the handicapped).

In response to the problems, the authorities are reviewing alternative programs to utilize more market-oriented incentives to reduce unemployment among the young, and provide them with work experience. In Kazakstan, for example, a law is being prepared asking the State to support entrepreneurship for youth through tax privileges and loans for young entrepreneurs.

In summary, however, so far the emerging problem of unemployment among young people has received only piecemeal attention by officials; there has been no real attempt to provide a comprehensive policy review and develop effective programs. This is clearly not for lack of concern, rather there is considerable uncertainty concerning the appropriate policies and the question of priorities given the severe fiscal difficulties. Ongoing reforms in the vocational training system, for instance, are clearly important, but restructuring will have to be accomplished in the context of general reform of the education system. Similarly, specific labor market policies to deal with the problems of unemployed young people involve more general labor market policies relating to social insurance and job creation.

The difficulties in establishing proactive, effective labor market policies for young people are evident in the discussion concerning a recent proposal to reduce the minimum working age from 16 to 15. It is argued that economic distress is so great that many young people are forced to leave school and work to supplement family incomes. Reducing the working age would decriminalize and abolish penalties for those leaving school to work. Reducing the legal working age might increase the willingness of formal sector employees to provide work experience for young people and reduce their chances of being exploited as illegal workers. The ministries concerned with unemployment, however, fear that this would simply encourage more people to join the growing number of unemployed, further taxing the social protection systems.

In terms of providing immediate relief for affected individuals, social insurance programs such as unemployment benefits can be important. In the context of the former Soviet Union social insurance like all public support or assistance was not well-targeted and there was little concern for efficiency of service provision. There is considerable room for improving administration and better targeting. In the specific case of young people, however, they are generally ineligible to receive normal unemployment compensation because of their limited work experience. Any reform of the unemployment social insurance programs will need to consider the specific needs of young people.

Employment promotion in the public service can provide valuable work experience for young people and can be part of an active labor market policy. However, in Central Asia, public employment opportunities are limited due to lack of funds. In Kazakstan, only a

III. SOCIAL COSTS OF TRANSITION FOR CHILDREN

small fraction (5 percent) of all funds allocated for social protection is currently intended for employment promotion. About half of the registered unemployed participants in public work programs are young people (aged 16-18) and wherever possible out-of-school youths are integrated into public work programs (Table 4).

Table 4: Unemployment Benefits for Young People in Kazakhstan

	Total (numbers)	Young people (16-29, numbers)	Young people (16-29, percent of total)	Young people in rural areas (percent of total youth)
1 Registered unemployed by the beginning of 1995	70,078	36,409	52.0	56.0
2 Total number of persons registered as unemployed anytime during 1995	203,164	92,042	45.3	46.5
3 Persons who dropped out of unemployment statistics during 1995	133,685	63,551	47.5	44.1
4 Dropouts due to re-employment through intervention of the labor offices	34,456	15,959	46.3	51.0
5 Registered unemployed by the end of 1995 (line 1+2-3)	139,557	64,900	46.5	54.2
6 Number of persons receiving unemployment benefits	73,516	29,984	40.8	54.0
7 Number of retrained persons	9,459	7,931	83.8	39.1
8 Number of persons participating in public works	2,037	909	44.6	49.9
9 Number of persons receiving other forms of social benefits	2,598	814	31.3	38.0

Source: Ministry of Labor and Social Protection

However, the limited nature of these programs means that they cannot substantially reduce unemployment among young people. Retraining programs have been particularly ineffective in rural areas. In addition, the existing programs are not well received by young people because of the relatively small financial incentives and the often unskilled activities involved. In some sense there is too much of the flavor of the compulsory work camps, which were organized in Soviet times by schools or enterprises. To be effective public works employ-

ment will have to be combined with retraining and incentives for both the employees and employers.

D. DETERIORATING SOCIAL INFRASTRUCTURE

The economic crisis accompanying independence and the breakdown of the central planning system have had particular impact on the provision of social and infrastructure services. Two related sets of issues have evolved:

- The infrastructure or service facilities that had previously been maintained by large state firms and farms are in many cases being transferred (divested) to other hands in the course of developing a market economy.
- The limited fiscal resources in both the private and public sectors are leading to a sharp deterioration in operations.

In both instances the net result is a sharp fall-off in service provision as facilities are closed or systems degenerate. As in many other cases in this transition period, the consequences are particularly harsh for children whose developmental needs are not being met. In the Chapters below, the issues concerning divestiture of social assets are addressed, followed by more detailed discussion of some specific problems, including the (i) lack of heating in schools and homes, (ii) transport difficulties, (iii) deteriorating sanitary conditions in public centers including schools, and (iv) worsening housing conditions.

1. Divestiture of Social Assets

One of the major impediments to the restructuring of former state enterprises is the necessity to divest them of social and municipal assets. The kindergartens, health clinics, milk kitchens, heating plants, and other public service centers, formerly maintained through central planning subsidies, must be spun off if the enterprise or farm is to compete in the emerging market place. In theory these social assets are supposed to be turned over to local governments, charity institutions, or private sector operators. In practice there is no systematic mechanism to maintain these assets and their services. In many cases

enterprises close such facilities when local authorities do not intervene in time. In other cases, the local government lacks the financial resources to maintain operations and again the asset is closed. The results of one study in Kazakstan show that the costs of maintaining the existing enterprise-operated social assets in education were equivalent to about 20 percent of the total public budget for education; for health the corresponding figure was 8 percent. Local governments lack the budgetary resources to absorb these extra costs (Table 5).

Table 5: Social Assets in Kazakstan Proposed for Divestiture

	Total	Urban	Rural
Facilities (numbers, November 1995)			
Dormitories	960	609	351
Health	567	356	211
Education	3,507	2,222	1,285
Kindergartens	3,076	1,147	1,929
Annual Operating Expenditures (million Tenge, 1994)			
Dormitories	743.0	702.1	40.9
Health	764.2	713.1	51.2
Education	2,776.3	621.5	2,154.8
Kindergartens	2,542.4	2,009.4	533.0

Notes: Facilities are those proposed for divestiture as of November 1995; expenditures are estimated for 1994.

Source: World Bank, Ministry of Finance

The net result is that the ongoing divestiture is forcing a massive closure of facilities especially those related to child care such as kindergartens, children's sanitariums, milk kitchens and health-care posts. The developments for kindergartens are quite clear (Chapter IV.A.3). In Kazakstan the share of kindergarten facilities financed through public funds from the Ministry of Education increased from 27 to 44 percent between 1991 and end-1994. In the Kyrgyz Republic, the takeover was even more pronounced; whereas in 1991 the Ministry of Education and Sciences was responsible for only 26 percent of all kindergartens, at the beginning of 1995 it had to finance 55 percent of the existing facilities. In both countries during the process of divestiture, the absolute number of kindergartens declined by more than 50 percent.

Closure of some social assets is desirable. Under central planning there was little thought given to the proper level of service or to balancing the costs and benefits of public resources. In principle, the rationalization of the current set of social assets should be based on (i) redesigning service provisions to meet changing needs, (ii) increasing the capacity utilization rate and service efficiency, (iii) providing access for all social groups with special privileges for vulnerable groups, (iv) reducing operational costs, and (v) encouraging service by non-governmental or private sectors.

Evidence suggests, however, that local governments do not practice uniform solutions concerning the transfer of social assets. Decisions are being made in the midst of a fiscal crisis by officials who have little training in conditions of unprecedented institutional change. Local government officials and kindergarten administrators are often not aware of the actual costs of operation or how these costs could be reduced through more efficient operation or enhanced revenue mobilization. Local officials have little experience in deciding such matters as the utility of resource mobilization through user fees or how to restructure personnel in order to achieve cost recovery.¹

2. Lack of Heat for Schools, Hospitals, and Homes

As noted above, local administrations lack the financial resources to maintain social service facilities. A serious problem is that schools, hospitals, and other public centers are often unheated, in spite of very cold winters. During the Soviet period, fuel for school heating was provided at highly subsidized prices. After independence, energy prices moved to competitive international levels and energy bills for imported fuel must be paid for in hard currency. The high cost of the petrol and transport required to bring the fuel to remote towns adds to the expense in some cases.

As a result of the financial constraints, many schools and health clinics have had to close down during the winter months for varying periods. For Kzyl-Orda Oblast in south-western Kazakstan, it is reported that 5 secondary schools, 28 boarding schools, and 87 pre-

1 One study on social assets concluded that the high utility costs of the facilities were a major problem. On average it was found that 30-60 percent of the total operating budget of the facilities was accounted for by utility costs. Accordingly, the introduction of metering devices and energy conservation materials would be desirable. Public investment funds are, however, quite limited and the financial crisis is likely to limit proper action.

Photo 8: Winter



schools and out-of-school facilities had to be closed between mid-1994 and mid-1996, largely because of lack of heating. The urban situation is often not much better. In the city of Tokmok, for example, just 50 kilometers south of the Kyrgyz capital, approximately one third of the schools closed for at least one month in the winter of 1995/96 because of the lack of coal.

Because many school buildings in Kazakstan and the Kyrgyz Republic are without proper heating, respiratory diseases have become more common among school children in the last few years (Chapter IV.B).

Parents especially in the rural areas are therefore naturally reluctant to send their children to school during the long winter months.

The situation in the health sector is similar. In the city of Kzyl-Orda, Kazakstan, for example, the administration of all three city hospitals had to close wards due to the lack of funds for heating. They often amalgamated the children wards. Small children shared beds, even though they had different diseases. This overloading has acted to spread infectious diseases and worsen the general health situation of children.

Unfortunately, many of the children's homes are also without heat. For example, in Naryn city, in the Kyrgyz Republic, those living in multi-family apartment buildings (approximately 35 percent of the total population) have lived without heat for the last two winters as a result of the failure of the central district heating system. Some of the families have been forced to move in with relatives who have detached homes that can be individually heated. Families who stay in the

Photo 9: Children Waiting for the School Bus



unheated apartment buildings reported increases in respiratory illnesses and other health problems.

3. Failing Transport Restricts Access to Schools

Transport problems are almost as serious as heating problems, especially in rural areas. Local governments have virtually no funds to repair vehicles and roads or to buy fuel for student transport. In Kazakhstan in 1994-95, 558 schools and boarding houses were closed mainly due to lack of transport for the children. In the Kyrgyz district (*raion*) of Tokmok the local government resorted to selling two thirds of their existing transportation fleet to obtain funds for operations. This in turn led to severe transport problems for school children. The transportation costs for a family in rural areas of the Kyrgyz Republic, for sending four children to school often exceed Som 50 a month. This is equivalent to more than 10 percent of a family's disposable income; indeed a difficult burden. The lack of transport has had a similar impact in limiting access to health facilities and services. This in turn has contributed to the worsening of health indicators (Chapter IV.B.).

4. Poor Sanitary Conditions

The financial difficulties faced both by families and governments have resulted in sharply deteriorating sanitary conditions in public centers such as schools and health facilities. Although many schools have built-in facilities for water and sanitation, in recent years these often have not functioned due to lack of maintenance or an irregular supply of water. In many instances, water has to be hand carried from long distances to the schools. Children often lack safe drinking water because funds are unavailable for fuel for boiling water.

The recent hard times exacerbate the preexisting lack of sanitary facilities in schools. Reflecting the relatively low income level in the region, and local practices, only 10-15 percent of the schools, mostly in the cities, are connected to sewage systems. Children usually use outdoor pit latrines. Only 40-56 percent of these facilities are pumped latrines. Pit latrines are often not cleaned and there is no water or soap near them for children to wash their hands. These conditions are especially difficult for children in the cold winter months.

5. Worsening Housing Conditions and Faltering Access to Communal Services

Generally worsening living conditions are of significant concern to children. The former Soviet Union was widely known for failing to provide adequate housing for its citizens.¹ The economic depression since independence has severely affected the construction industry in general and house building in particular. Public investment budgets have slipped to negligible levels and falling personal income has further limited housing construction to the small number of individuals who have clearly benefited from transition.² Thus the overall size of the housing stock, insufficient before independence, has not substantially increased.

Privatization activities have, however, transferred single-family houses and apartments to their occupants. Because occupants received

1 Robert W. Campbell notes that Soviet cities in the late 1980s provided approximately 9 square meters of living space per person. (*The Socialist Economies in Transition: A Primer on Semi-Reformed Systems*. Bloomington, Indiana University Press: 1991, p. 127).

2 The outskirts of many Central Asian cities show small developments of houses for the newly rich and, further from the center, newly-built country houses (*dachas*). The latter are sometimes a middle-class phenomenon, benefiting from family labor on newly-owned property.

clear title to their housing units, in spite of the economic depression, housing has not proved the problem that it would in other countries given a similar fall in personal income. The problems lie in the (i) increasingly poor maintenance of commonly owned facilities such as those for heating and water supplies, and (ii) mainly poorer neighborhoods in urban centers and rural areas where dwellings lack connection to utility services.

Maintenance problems in urban centers have their roots in Soviet construction and organization practices. Apartment buildings, for example, had previously been maintained by governments or by state enterprises. With privatization the individual units were turned over to their occupants, but there was little concurrent development of mechanisms to continue maintenance. Maintenance of common structural features cannot be provided by the individual occupants. Water supplies, centralized (district) heating, electricity, utility gas, and sewage disposal all rely upon common infrastructure; an infrastructure that is deteriorating fast in most instances. This failure of the communal service facilities is difficult to address given both the limited disposable income of the families living in the buildings and the equally limited public funds. In some instances system failure results from broader municipal problems outside the immediate buildings. In either case, the failure to deal adequately with this problem risks increased deterioration in the housing stock and the devaluation of individual housing units, in addition to the worsening health and living environments.

In other housing situations, the problems result from a lack of services. In rural areas, many single family dwellings were never connected to potable water supplies or were dependent on state farms to supply fuel and water. The economic restructuring has resulted in privatized farms with fewer means or resources to fulfill social obligations. Moreover, prices of fuel have increased (with the end to the subsidies given under central planning) at a time when declining incomes place great pressure on family budgets. Many rural families simply cannot afford to heat their homes during the harsh winter.¹

The cities have also seen more problems as the increased migration of poor rural families to urban centers has resulted in an expansion of the preexisting slum areas. The new arrivals have to deal

1 Partly as a result, there are reports that farm families are resorting to more traditional heating methods, including relying on wood and animal dung. The increased use of wood is exacerbating the lack of soil cover and the deforestation in many areas.

increasingly with housing that is not connected to urban water, sewage, or heating systems. As a result, the living conditions of many of the children of these families is increasingly harsh and has contributed to poor health conditions.

E. ENVIRONMENTAL PROBLEMS FOR CHILDREN

Children are more vulnerable than adults to air pollution, toxic chemicals, and polluted water. Many childhood diseases now being seen in Kazakhstan and the Kyrgyz Republic are directly caused by poor environmental conditions inherited from the former Soviet Union. The former Soviet Union had an abysmal environmental record and Central Asia, especially Kazakhstan was the site for major environmental problems. The Ministry of Health in Kazakhstan has suggested that up to 90 percent of health problems are related in some way to the poor environment. The problems include:

- the air and water pollution and solid waste resulting from mining or industrial activities still carried out with Soviet-era, highly-polluting technologies;
- the shrinking of the Aral Sea with resultant increase in desert land and the release of toxic salts from the dry sea bed; and
- the radioactive contamination due to improper waste storage in many areas of Kazakhstan and south Kyrgyzstan, and from the nuclear tests in the People's Republic of China (PRC) and near Semipalatinsk in Kazakhstan.

1. Air Pollution

Air pollution problems are caused by company towns' industrial activities (Chapter III.C.5), urban areas in winter using low-grade coal for heating, toxic salts being released from the dry bed of the Aral Sea (see section 2 below), and nuclear testing and storage sites (Section 3).

Air pollution in the urban centers is a major cause of respiratory diseases, especially among children. The continental climate of Central Asia creates a need for heating fuel in winter. Coal, the primary fuel for heating homes and schools, is also one of the greatest pollutants.

For example, the majority of Bishkek's 4,000 private houses are heated by coal, which contributes an estimated 2,000 tons of air pollution to the city each year. Likewise, Bishkek is home to over 270 industrial and transport enterprises, 50 of which are the most serious polluters in the country. Among these is the central heating and electric plant, which in 1994 emitted 22,500 tons of pollutants or 35 percent of total emissions for the entire Republic.¹ According to physicians, as a result of air pollution, the incidence of respiratory problems for children is 20 percent higher in the center of the city than on the periphery.

2. Litany of Water Related Problems

The Aral Sea region provides horrible evidence of the impact of unsustainable environmental exploitation on health and livelihood in the former Soviet Union. In 1960, the Aral Sea was the fourth largest inland lake in the world. By 1989, its water level had fallen 14.3 meters, the surface area had shrunk by 45 percent, and salinity had increased 2.8 times to approximate that of sea water. The once sizable fishing industry collapsed and the ecosystem of the sea and the associated river deltas has been destroyed. The exposed seabed releases into the air, salts toxic to humans and agriculture crops, and causes extensive pollution of nearby surface and groundwater. The environmental problems of the entire basin are serious and have reached disaster levels close to the sea itself.

Some of the major problems for the people closest to the Sea are the lack of potable water, a high incidence of waterborne diseases, the adverse effects of sand and salt storms, and a severely depressed economy. In 1993, for example, the incidence of chronic, non-infectious diseases in the highly polluted Aral Sea region was about two times higher than the national average. The effect on infants and children is particularly pronounced. The reported rate of infant mortality near the Sea is nearly one quarter higher than the national average. Up to 80 percent of pregnant women in the Sea area suffer from anemia or iron deficiency, compared with a nationwide average of 60 percent. Iron deficiency can impair productivity in adults and affect

1 In a joint effort with the World Bank, the Asian Development Bank is providing a loan to the Government of the Kyrgyz Republic to rehabilitate the heating plant in Bishkek. The project, among other activities, will upgrade the plant with technology that is more energy efficient and results in less pollution.

Photo 10: Kazak Boys at Play near the Aral Sea



children's ability to learn. Prior to independence all salt consumed in the Sea area was iodized. But with the collapse of the state subsidies from the central government of the former Soviet Union most of the food enrichment programs for ecologically affected regions have been abolished.

Kyzyl Orda near the Aral Sea is consistently the oblast with the highest rate of infant mortality in Kazakhstan. The most serious health problems affecting children in this region are respiratory diseases, especially acute respiratory infections (ARI). In 1994 this accounted for more than 30 percent of infant deaths and 65 percent of medical consultations. In some raions close to the Sea, 50 percent of infant deaths are caused by ARI. The rapidly worsening prenatal conditions were responsible for another 30 percent of the infant mortality rate. Acute diarrhea, linked to water and sanitation problems, is the third major factor, accounting for 13 percent of total infant mortality in 1994.

Beyond the environmental catastrophes such as the Aral Sea, water-related problems arise with the declining availability of potable water and functional sewage systems. The water and sanitation systems in Central Asia are in shambles due to the poorly maintained municipal systems and the ongoing contamination of drinking water

by industrial and agriculture activity. In 1995, it was estimated that every year over 1 billion cubic meters of waste water is discharged into aquifers and surface waters, including 1.63 million cubic meters of insufficiently treated water that flows directly into lakes and streams. Poor maintenance of extensive Soviet constructed water systems exacerbates the problem. In Tokmok (city) in the Kyrgyz Republic, for example, the length of the water main is 240 km, but half of this system is not functioning.

Children are often the first to suffer the ill-effects of contaminated water. In schools, day-care centers, and homes, a lack of clean drinking water and poor sanitation retard child development. Extreme cases are found in regions of environmental catastrophes as, for example, near the Aral Sea. Even in the more average localities the situation can have a major impact on health. In Tokmok, as a result of the failure to operate the water systems, families use polluted water taken directly from the untreated irrigation canal. The city's chief pediatrician linked the water problem directly to the increased incidence of infectious and parasitic diseases. In January 1994 the consumption of dirty canal water in the Karl Marx State Farm resulted in 16 cases of typhoid fever among school-aged children. This was a repeat of a 1991 incident when 80 children and adults fell ill. Contaminated water was also blamed for the many dysentery cases among children. In the city of Kara-Kol in Issyk-Kul Oblast of the Kyrgyz Republic, it is estimated that 60 percent of the population drinks untreated water directly from the Kara-Kol and Kashka-Suu Rivers. As a result, the population has suffered a 62 percent increase in viral hepatitis, between 1990 and 1996.

3. Nuclear Radiation Problems

Nuclear radiation problems stem from a number of causes: improperly maintained storage facilities in southern Kyrgyzstan and western Kazakstan, the Soviet-era military testing of nuclear bombs near Semipalatinsk in Kazakstan, and radioactive dust resulting from the Lob Nor nuclear testing site in western PRC. These problems are particularly difficult to treat, resulting in genetic damage that can last for generations. The most serious problems are in the Semipalatinsk nuclear testing region, where a very high proportion of children are born deformed. The health of an estimated 2 million people is still affected in one way or another by the nearly 450 nuclear tests previously conducted in this region.