URBAN "NOVOSTROIKI" SETTLEMENTS IN BISHKEK, KYRGYZ REPUBLIC

Issues and Options

April 2007

Document of the World Bank
CONTENTS

EXECUTIVE SUMMARY .............................................................................................................................................. i

1. THE IMPORTANCE OF NOVOSTROIKI ........................................................................................................... 1
   The Origins of Novostroiki ............................................................................................................................. 1
   Purpose of Study .............................................................................................................................................. 2
   Data and Methodology ................................................................................................................................... 2

2. PROFILING NOVOSTROIKI IN BISHKEK ......................................................................................................... 3
   Who lives in Novostroiki? ............................................................................................................................... 4
   Migration ......................................................................................................................................................... 6
   Education ....................................................................................................................................................... 6
   Employment .................................................................................................................................................. 7
   Incomes and household perceptions of poverty ............................................................................................. 8
   Current legal status of land, houses and residents ....................................................................................... 10
   Living Conditions in Novostroiki Areas ......................................................................................................... 12
   Housing ...................................................................................................................................................... 12
   Environment ............................................................................................................................................... 13
   Drainage .................................................................................................................................................... 14
   Access and Quality of Basic Infrastructure Services ................................................................................... 14
   Water .......................................................................................................................................................... 14
   Sanitation and solid waste ............................................................................................................................. 16
   Electricity ..................................................................................................................................................... 17
   Transportation ........................................................................................................................................... 17
   Infrastructure Access and Quality by Location ............................................................................................. 17
   Education and health services in Novostroiki areas .................................................................................... 18
   Health ....................................................................................................................................................... 20
   Crime .......................................................................................................................................................... 20
   Ranking Novostroiki on Multiple Indicators ............................................................................................... 20
   Summary of Main Findings ......................................................................................................................... 23

3. WHAT IS BEING DONE IN NOVOSTROIKI AREAS? ........................................................................................... 24
   Government initiatives ................................................................................................................................. 24
   Community/NGO initiatives .......................................................................................................................... 26

4. WHAT NEXT? STRATEGIC QUESTIONS FOR POLICYMAKERS RESPONSE .................................................... 27
   Annex 1. Map of Novostroiki Areas .............................................................................................................. 30
   Annex 2. Summary of Key Legislation ........................................................................................................ 31
   Annex 3. Main Government Entities Engaged in Novostroiki ..................................................................... 34
   Annex 4. International good practices and suggestions for further work in Kyrgyz Republic ...................... 42

TABLES

Table 1: Household Characteristics in Older Novostroiki Areas in Bishkek Compared with HBS and KIHS 2003 Averages ................................................................................................................................................. 4
Table 2: Demographic Profile of Surveyed Novostroiki .................................................................................. 5
Table 3: Highest Educational Level Completed by Novostroika for Adults 25 and Over .................................... 7
Table 4: Occupational Profile of Adult Residents by Novostroiki ...................................................................... 7
Table 5: Median monthly per capita incomes for the best off Novostroiki residents are more than six times greater than for the poorest residents. ................................................................. 8
Table 6: Median Monthly per Capita Incomes Across Novostroikas ........................................ 9
Table 7: Regular and Irregular Process for Novostroiki Establishment....................................11
Table 8: Housing Conditions in the Different Novostroiki .......................................................13
Table 9: Household Access to Piped Water Varies Substantially among Regions ....................15
Table 10: Types and Location of Water Supply Facilities..........................................................15
Table 11: Waste collection has improved since 2002 (%) ........................................................17
Table 12: Infrastructure Service Access and Coverage by Novostroi.ka ...................................18
Table 13: Even the Oldest Novostroiki Areas Lack Sufficient Schools....................................19
Table 14: Schools Built to Serve Novostroiki Areas are very Crowded ....................................19
Table 15: Differences among Surveyed Novostroiki on Key Indicators....................................21

FIGURES

Figure 1: Total Hectares of Land in Novostroiki Areas in Bishkek, 1988-2006........................ 3
Figure 2: Households who consider themselves poor are less likely to evaluate their situation positively ...................................................................................................................................... 10
ACKNOWLEDGMENTS

This analysis draws extensively from the three reports prepared as background for this study by the Bishkek Center for Social Initiatives, Mr. A. Krasin, and Hydrophil/ GHK. Preparation of the background reports and of the final study was carried out under the guidance of Yoko Katakura (ECSSD). The primary author of the study was Ellen Hamilton (ECSSD). A number of people assisted the team during the completion of this study. Special thanks are due to participants in three roundtables held in Bishkek on March 5, who provided valuable feedback on the draft report. The team would also like to thank the many other Kyrgyz specialists who generously shared their knowledge and views during visits to Bishkek and Osh in late February to early March, 2007. Peer reviewers Judy Baker (FEU), Alex Bakalian (MNSSD), and Farouk Tebbal (Cities Alliance) provided thoughtful comments on the work at various stages, as did Sarosh Sattar (ECSPE), Jonathan Kamkwala (ECSSD), Felix Jakob (ECSSD) and Mirlan Aldayarov (ECSSD). A special thanks is due to Irina Novikova (ECSSD) who provided timely assistance with additional data analysis.
EXECUTIVE SUMMARY

The primary purpose of this study was to profile residents and living conditions in novostroiki, or the rapidly growing areas of new self-built construction ringing Bishkek where more than one-fourth of city residents now live, in order to identify the major problems and areas for potential future Bank and donor engagement. The study findings are based on analysis of results from a survey of 493 households in nine novostroiki established from 1989-1991, as well as focus group findings, a study of the institutional framework, and a study of sanitation. In interpreting the survey results, it is important to keep in mind that households in more recently established novostroiki face more difficulties than older novostroiki where residents have had more time to address their problems.

The major findings are:

- Novostroiki are a large and growing problem for Bishkek: novostroiki growth has resumed in recent years and is unlikely to stop.
- Novostroiki residents are more diverse than most people think. Incomes and living conditions vary greatly among novostroiki, as do access to, and quality of, basic infrastructure, health and educational establishments. Primarily rural migrants, novostroiki residents build their own houses with the help of the community (ashar).
- Better off novostroiki residents live in superior houses and have access to more services.

The study finds that novostroiki residents encounter difficulties in four broad areas.

- Environmental hazards. Ash, poor drainage, flooding and exposure to other environmental hazards increase health problems and threaten agricultural livelihoods for residents in some novostroiki.
- Access to basic infrastructure: Even residents of the oldest novostroiki and relatively well off lack access to clean water, adequate roads, public transport, and reliable electricity. Although the survey did not cover more recently established novostroiki, it is clear from observation that infrastructure deficit is more serious for newer settlements.
- Access to basic educational and social services. Although a high percentage of novostroiki residents are children, access to schools is limited and children study in either overcrowded neighborhood schools or commute to more distant municipal schools. Preschools are not available.
- Registration of land, housing and residents: High fees, poor quality construction, difficulty in collecting the required documentation all contribute to the non-registration of land and housing without which households cannot fully use their property. Households who cannot document their rights to land plots are at a particular disadvantage as they are not able to register their residency (i.e., obtain a propiska). Unregistered residents cannot vote or access social benefits, have difficulty enrolling children in school or in registering for military service.
1. THE IMPORTANCE OF NOVOSTROIKI

The Origins of Novostroi

Areas of self-built individual housing ("massy individualnogo stroitelsvta" or "novostroiki") first appeared on the outskirts of the two largest Kyrgyz cities, Bishkek and Osh, in 1989. In Bishkek, members of the city elite organized into the “Ashar” association of self-builders and demanded land for construction from the government in 1989. Lacking sufficient funding to meet existing state housing obligations, and faced with increasingly vocal groups of households owed housing, the government responded by giving households unserviced plots of land in peri-urban areas (henceforth “novostroiki areas”). But this did not solve the problem as the ensuing economic collapse meant more and more people moved to Bishkek and Osh, which were attractive precisely because of their size and more diversified economies. Both cities are important trade centers for Central Asia. Bishkek is the trade center for imported goods, especially from China and Osh is important for trade between Uzbekistan and Kyrgyz Republic.

"Novostroi are a bridge between city and village. I came here in order to give my children a good education and in hopes of finding a job."

"I think we need to replace the name “novostroika” with something else. When you say “novostroika,” the word repulses everybody, even taxi drivers. They do not want to drive you there. We receive guests as anybody else and are ashamed of such attitudes."

—Novostroi focus group participants

In-migration to Bishkek and Osh since 1989 resulted in the rapid development of novostroiki. From 1989-1999 Bishkek grew by about 23% from 617,000 in 1989 to 800,000 in 1999 according to the censuses in those years. During this same period, Osh’s population stayed at about 210,000 residents according to census information. However, unofficial estimates for the populations of the metropolitan regions for both cities suggests that population growth has been higher. Estimates suggest that the population in Bishkek and its surrounding area grew by 35-40% while Osh and its surrounding area grew by 15-20% during the 1989-1996 period alone. Current population estimates for both cities are even higher. An estimated 1 to 1.2 million people (or about one-quarter of all Kyrgyz residents) live in Bishkek. Osh, the second largest city and capital of Osh Oblast, officially is home to 268,000, but if the population in the peri-urban areas of Kara Suu rayon and a share of non-registered population from various parts of the south of the country are taken into account, the population estimate doubles to about 500,000.

1 In-migration to the largest cities has been a common pattern seen in many of the countries of the former Soviet Union.
Purpose of Study

This study is the first to systematically analyze living conditions in Bishkek novostroiki. The study was initiated in response to a request from the Government for World Bank support for a project to improve living conditions for novostroiki residents. As novostroiki are a relatively recent phenomenon, and as thus far knowledge about novostroiki has been largely limited to anecdotal evidence, the study’s primary objective was to profile novostroiki residents and their living conditions in order to identify the major problems and opportunities for future Bank and donor engagement. The study’s secondary objectives included gathering some basic information about the institutional context and about ongoing efforts to address novostroiki problems. The study findings point clearly to a number of areas where more work would be needed.

Data and Methodology

The study draws on four main sources of new information collected specifically for this work in 2005:

- a quantitative survey of 493 households (2183 household members) in nine novostroiki areas in Bishkek, including resurveying 300 novostroiki households who were also surveyed for a background study for the 2002 poverty assessment.
- focus groups with individuals from local self-governments, Territorial-Block Local Self-Governments (TBLSGs); NGOs, self-help groups; and novostroiki residents.
- a review of the institutional and legal framework;
- an engineering study of novostroiki areas focusing on sanitation.

The nine novostroiki areas selected were all from the first wave of novostroiki established in 1989-1991. As a result, these areas would be expected to be much better off as they have had more time for infrastructure to be built and for transport and other linkages with the city to be established. Residents have also had more time to improve and complete their housing.

The study also draws on earlier work for the poverty assessment and the State Programme on Poverty Reduction and Economic Development (SPPRED).

---

2 Although Osh has also experienced rapid population growth, anecdotal evidence suggests novostroiki have developed quite differently in Osh. As it was not possible to collect the same kind of information for Osh as for Bishkek, Osh has been excluded from this study, which focuses solely on novostroiki in Bishkek.

3 Please see BCSI (2005) for a more complete description of the survey methodology.
2. PROFILING NOVOSTROIKI IN BISHKEK

Novostroiки Novostroiки growth gained new momentum since the March 2005 change in government. As shown in the Figure below, land allocated for novostroiки gained new momentum after 1997 with 2005 being a particularly dynamic year for novostroiки land allocations, which surged after the March 24, 2005 change in government. By end 2006 novostroiки areas spread across more than 4000 hectares of land where over 35,000 lots had been allocated.

![Figure 1: Total Hectares of Land in Novostroiки Areas in Bishkek, 1988-2006](image)

*Including some land still officially under the control of the surrounding Chui oblast.*

Source: Authors’ calculation from data provided by OGUKS (2007).

The most recent wave of novostroiки establishment has been characterized by people seizing land instead of waiting for plots to be allocated. This is in part a result of the 1999 Land Code, which entitles Kyrgyz citizens to a land plot for housing construction if they do not have one already. Article 32 of the Land Code states: “A land plot shall be allocated to the citizens of the Kyrgyz Republic into ownership by the authorized body gratuitously only once throughout the entire territory of the Kyrgyz Republic, in particular: for construction and maintenance of a residential house and for personal sustenance households in accordance with established norms.” Many specialists believe that revoking this article is a prerequisite to slowing or stopping land seizures.
Current population estimates for novostroiki areas vary widely as a result of a lack of reliable information. Population estimates made in late 2004 to early 2005 range from a low of 110,966 (based on official registration or “propiska” data collected by the Internal Affairs Department) to 221,707 (based on information provided to the Mayor’s office by Territorial Community Councils (TOSs)) to 300,000 estimated by the Bishkek Center for Social Initiatives (BCSI) based on information from the TOSs. The difference between the latter two estimates likely reflects whether only permanent residents are included or whether seasonal/temporary residents are included. Most sources agree that a large number of novostroiki residents are not registered in the novostroiki. Sources also agree that many novostroiki residents spend only part of the year in Bishkek working and spend the remainder of the year in their home regions.

Novostroiki areas encircle Bishkek, but are especially prevalent in the north and southwest. Annex 1 shows the location of novostroiki areas on a satellite image of Bishkek. Areas shown in yellow and orange were developed during the first wave of settlement, 1989-1991. Novostroiki areas outlined in orange are those selected for inclusion in the study, all of which date back to 1989-1991. Newer novostroiki areas are shown in white and either adjoin existing areas or are located in the periphery, far from the city center. Novostroiki development is most extensive along the main transportation corridors to the north and west. Comparison of the satellite imagery used for this map with the map of novostroiki areas prepared by the city for the recent general plan work suggests that some new and developing novostroiki areas are not yet included on the city’s map. For example. One such area can be found south of Kok-Jar.

Who lives in Novostroiki?

Novostroiki households surveyed for this study differed little from national averages for household size and number of children. The table below compares the demographic profile of households in novostroiki areas based on the novostroiki survey (henceforth “BCSI survey”) carried out for this study with national averages calculated from the 2003 Household Budget Survey and the Kyrgyz Integrated Household Survey. Average household sizes and the average number of children were quite consistent across the three surveys.

### Table 1: Household Characteristics in Older Novostroiki Areas in Bishkek Compared with HBS and KIHS 2003 Averages

<table>
<thead>
<tr>
<th>Household Characteristics</th>
<th>HBS 2003</th>
<th>KIHS 2003</th>
<th>BCSI (Novostroiki) Survey 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household size</td>
<td>4.4</td>
<td>4.1</td>
<td>4.4</td>
</tr>
<tr>
<td>Headed by females (%)*</td>
<td>34.0</td>
<td>33.3</td>
<td>14.8</td>
</tr>
<tr>
<td>Average number of children*</td>
<td>1.6</td>
<td>1.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Average number of prime-age adults</td>
<td>2.1</td>
<td>2.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Average number of elderly</td>
<td>0.3</td>
<td>0.4</td>
<td>0.1</td>
</tr>
<tr>
<td>Number of households in survey</td>
<td>1081</td>
<td>4760</td>
<td>493</td>
</tr>
</tbody>
</table>

* 0-17 years  
** 18-56 years for women and 18-61 years for men.  
*** 57+ years for women and 62+ years for men.

Far fewer novostroiki residents are pensioners than expected. The BCSI survey found that fewer than 2% of inhabitants were pensioners whereas the 1999 census reported that 11% of Bishkek residents were older than working age. Several factors likely explain the small share of pensioners in novostroiki areas. First, pensioners are less likely to migrate in search of economic opportunities. Second, pensioners are more likely to have benefited from Soviet-era housing programs and to have been able to privatize their units when transition began.

Fewer novostroiki households are headed by women than expected. The Kyrgyz Integrated Household Survey and the Household Budget Survey both found that 33-34% of all households were headed by women in 2003. This strikingly high share results from the large number of men working in other countries. The BCSI survey for this study found that only 15% of households were headed by women. Although novostroiki households likely benefit because a higher share of families have two parents, the results suggest that novostroiki households are less likely to benefit from remittances sent by male householders working abroad.

With fewer pensioners and more two-parent households than true for the country as a whole, it is not surprising that novostroiki households have higher ratios of working age adults. Households surveyed by BCSI on average had 2.6 working age adults, considerably more than the national average of 2.1-2.2 working age adults. With more working age adults one might expect households to have higher levels of formal and informal employment and, consequently, higher income levels.

The demographic structure of novostroiki varies. In the table below, Kolmo stands out for the small size of households, the small share of children, and the greater shares of working age adults and pensioners. As smaller households with fewer children are less likely to be poor, we would expect Kolmo residents to be better off. In contrast, Kasym has the highest share of children and the lowest share of working age adults and of female headed households, which suggests its residents are likely to be poorer. The small number of pensioners in all novostroiki is also noteworthy.

Table 2: Demographic Profile of Surveyed Novostroiki.

<table>
<thead>
<tr>
<th>Novostroiki</th>
<th>Ave. HH Size</th>
<th>% Children 0-17</th>
<th>% Working Age</th>
<th>% Pensioners</th>
<th>% Female headed HHs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kok-Jar</td>
<td>4.2</td>
<td>40%</td>
<td>59%</td>
<td>1%</td>
<td>11%</td>
</tr>
<tr>
<td>Ak-Bosogo</td>
<td>4.2</td>
<td>39%</td>
<td>60%</td>
<td>1%</td>
<td>20%</td>
</tr>
<tr>
<td>Ak-Orgo</td>
<td>4.8</td>
<td>37%</td>
<td>62%</td>
<td>1%</td>
<td>18%</td>
</tr>
<tr>
<td>Ak-Tilek</td>
<td>4.6</td>
<td>36%</td>
<td>63%</td>
<td>1%</td>
<td>10%</td>
</tr>
<tr>
<td>Ala-Too</td>
<td>4.7</td>
<td>40%</td>
<td>59%</td>
<td>2%</td>
<td>14%</td>
</tr>
<tr>
<td>Archa-Beshik</td>
<td>4.3</td>
<td>39%</td>
<td>59%</td>
<td>2%</td>
<td>13%</td>
</tr>
<tr>
<td>Bakai-Ata</td>
<td>4.5</td>
<td>43%</td>
<td>56%</td>
<td>2%</td>
<td>13%</td>
</tr>
<tr>
<td>Kasym</td>
<td>4.6</td>
<td>46%</td>
<td>53%</td>
<td>1%</td>
<td>9%</td>
</tr>
<tr>
<td>Kolmo</td>
<td>3.9</td>
<td>33%</td>
<td>64%</td>
<td>3%</td>
<td>17%</td>
</tr>
</tbody>
</table>

Migration

The overwhelming majority of novostroiki households have migrated from rural areas in distant oblasts. Only one-quarter of households surveyed came from other cities or urban settlements confirming this has been a primarily rural population flow. In total, about 85% of households came from oblasts outside the Chui oblast/Bishkek city area. One-third of households moved from lightly populated, but very impoverished, Naryn oblast, followed by Talas (15%) and Issyk-Kul (13.6%). About 12.7% of households came from surrounding Chui oblast while a mere 3.7% came from Bishkek city. The remaining households came from Jalal-abad (8.9%), Osh (8.3%) or Batken (3.4%) oblasts. The high percentage of households originating from areas outside Chui/Bishkek is somewhat unexpected as the survey included only the oldest novostroiki, where lots were originally allocated to households already in Bishkek who were on waiting lists for housing. The original residents apparently sold lots to newer migrants during the intervening years.

Education

The educational profiles of adults surveyed varies substantially by novostroika. The table below shows highest level of education completed for adults (25 years old and over). Education levels are highest in Ak-Tilek and Kolmo where more than three-quarters of adults have completed at least some higher education. In contrast, in Archa-Beshik, fewer than half of all adult residents have completed any higher education. Kasym and Ak-Bosogo also have low rates of educational attainment. One would expect better educated residents to be more likely to be employed and less likely to be poor, based on findings from the poverty assessment.

---

4 The share of Naryn migrants is particularly high in Bakai-Ata (52.6%) and Archa-Beshik (42.1%). The share is lowest in Kasym (18.0%). (BCSI 2005).

"Though there are many problems, nobody wants to return to the village as rural residents suffer from countryside life. Life there is also not easy. There is unemployment, lack of information—villagers could not sell their production. Novostroiki residents arrive mainly from the regions. Novostroiki are a bridge between city and village. I came here in order to give my children a good education and in hopes of finding a job.”

-Bakai-Ata focus group participant
Table 3: Highest Educational Level Completed by Novostroika for Adults 25 and Over

<table>
<thead>
<tr>
<th></th>
<th>Secondary or less</th>
<th>More than secondary (higher/ incomplete higher)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ak-Bosogo</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Ak-Orgo</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Ak-Tilek</td>
<td>15%</td>
<td>85%</td>
</tr>
<tr>
<td>Ala-Too</td>
<td>41%</td>
<td>59%</td>
</tr>
<tr>
<td>Archa-Beshik</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Bakai-Ata</td>
<td>43%</td>
<td>57%</td>
</tr>
<tr>
<td>Kasym</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Kok-Jar</td>
<td>32%</td>
<td>68%</td>
</tr>
<tr>
<td>Kolmo</td>
<td>22%</td>
<td>78%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39%</strong></td>
<td><strong>61%</strong></td>
</tr>
</tbody>
</table>


**Employment**

Most adults in novostroiki work informally or are inactive—only a small percentage of novostroiki adults hold formal jobs. The survey found that most novostroiki residents are involved in unskilled labor or small-scale market trading. Only 15% of adult residents hold formal jobs. One-quarter of adult residents either do not have a job or are looking for work, although this varies widely by novostroika as can be seen in the summary table below. For example, in Ak-Bosogo, more than half of all adult residents are not economically active whereas in novostroiki such as Ak-Orgo, Ala-Too, Bakai-Ata, Kasym. Kok-Jar and Kolmo this is true for fewer than one-fifth of adult residents.

Table 4: Occupational Profile of Adult Residents by Novostroiki
(Share of All Adult Residents)

<table>
<thead>
<tr>
<th></th>
<th>Ak-Bosogo</th>
<th>Ak-Orgo</th>
<th>Ak-Tilek</th>
<th>Ala-Too</th>
<th>Archa-Beshik</th>
<th>Bakai-Ata</th>
<th>Kasym</th>
<th>Kok-Jar</th>
<th>Kolmo</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No work/ looking for work</td>
<td>52%</td>
<td>12%</td>
<td>32%</td>
<td>13%</td>
<td>41%</td>
<td>20%</td>
<td>15%</td>
<td>19%</td>
<td>16%</td>
<td>25%</td>
</tr>
<tr>
<td>Formal Job</td>
<td>12%</td>
<td>14%</td>
<td>30%</td>
<td>14%</td>
<td>15%</td>
<td>7%</td>
<td>5%</td>
<td>20%</td>
<td>21%</td>
<td>15%</td>
</tr>
<tr>
<td>Informal Job</td>
<td>33%</td>
<td>37%</td>
<td>37%</td>
<td>17%</td>
<td>36%</td>
<td>28%</td>
<td>26%</td>
<td>36%</td>
<td>27%</td>
<td>32%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>37%</td>
<td>2%</td>
<td>56%</td>
<td>8%</td>
<td>45%</td>
<td>54%</td>
<td>25%</td>
<td>36%</td>
<td>28%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The core income for novostroika households is generated by:

- regular wage employment (men, 33.5%; women, 26.2%)
- casual employment (men, 29.2%; women, 8.1%)
- income from commercial activities (18.3%)
- income from construction and repair activities (6.9%).
- Other types of activities have less impact on incomes.

**Incomes and household perceptions of poverty**

**Surveyed households on average report low per capita incomes.** The median monthly per capita income was about 757 som ($17), which is the amount of the 2005 poverty line. Across novostroikas, median monthly income per capita ranged from 400 soms per month (about $9) to 1000 soms per month. (In interpreting the survey results, it is important to keep in mind that the survey covered only novostroikchi established in 1989-1991, which are relatively better developed and even "thriving in prosperity" as perceived by the residents from the most recently established novostroiki where incomes are likely substantially lower.) The table below summarizes median per capita incomes for novostroiki residents by income quintile. On average, monthly per capita incomes for the lowest (first) quintile are only 247 som, whereas those for the highest quintile (quintile 5) are 1,752 soms, a difference of more than six times. At the same time, annual per capita income figures show that the poorest residents (quintile 1) share only 5% of total income as opposed to 44% shared by the richest 20% (see table below).

**Table 5: Median monthly per capita incomes for the best off Novostroiki residents are more than six times greater than for the poorest residents.**

<table>
<thead>
<tr>
<th>Quintile</th>
<th>Median annual income per capita</th>
<th>Share in the total annual income</th>
<th>Median monthly income per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Som</td>
<td>USD</td>
<td>Som</td>
</tr>
<tr>
<td>First = poorest</td>
<td>2,533</td>
<td>$58</td>
<td>4.6%</td>
</tr>
<tr>
<td>Second</td>
<td>5,125</td>
<td>$117</td>
<td>10.7%</td>
</tr>
<tr>
<td>Third</td>
<td>8,000</td>
<td>$183</td>
<td>16.4%</td>
</tr>
<tr>
<td>Fourth</td>
<td>12,000</td>
<td>$275</td>
<td>24.3%</td>
</tr>
<tr>
<td>Fifth = richest</td>
<td>20,000</td>
<td>$458</td>
<td>44.0%</td>
</tr>
</tbody>
</table>

Source: BCS1, 2005
Household income profiles for novostroiki residents vary among novostroiki. Analysis of per capita incomes also shows a significant degree of inequality among the different novostroiki. As shown in the table below, the median monthly per capita income of households in Ak-Orgo is two and a half times greater than is true in Ak-Bosogo.

Table 6: Median Monthly per Capita Incomes Across Novostroikas

<table>
<thead>
<tr>
<th>Novostroika</th>
<th>Median monthly income per capita</th>
<th>USD (1$=43.7Som)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ak-Bosogo</td>
<td>400</td>
<td>$9</td>
</tr>
<tr>
<td>Ak-Tilek</td>
<td>567</td>
<td>$13</td>
</tr>
<tr>
<td>Kolmo</td>
<td>752</td>
<td>$17</td>
</tr>
<tr>
<td>Kok-Jar</td>
<td>800</td>
<td>$18</td>
</tr>
<tr>
<td>Ala-Too</td>
<td>803</td>
<td>$18</td>
</tr>
<tr>
<td>Bakai-Ata</td>
<td>838</td>
<td>$19</td>
</tr>
<tr>
<td>Kasym</td>
<td>850</td>
<td>$20</td>
</tr>
<tr>
<td>Archa-Beshik</td>
<td>1000</td>
<td>$23</td>
</tr>
<tr>
<td>Ak-Orgo</td>
<td>1000</td>
<td>$23</td>
</tr>
</tbody>
</table>


Household perception of poverty may be a better indicator of income than reported incomes, which are often understated. Households were asked whether they considered themselves as poor and whether they evaluated their situation positively. The results are quite consistent as shown in the Figure below. In Ak-Tilek and Kolmo fewer than 20% of households considered themselves to be poor while in Archa-Beshik more than 60% of households believed themselves to be poor. Novostroiki where a high percentage of households identified themselves as poor were places where a low percentage of households evaluated their situation positively. The results also suggest that households in novostroiki such as Kolmo and Ak-Tilek are less likely to be poor than those in Ala-Too and Archa-Beshik. This pattern contradicts the median incomes calculated above, but is consistent with other non-income dimensions of poverty, including housing conditions and infrastructure access, as will be discussed below.

As is true in other countries in the region, household income data are not the preferred measure of household welfare as respondents often underreport informal earnings and/or in kind income such as food produced on a household plot. The survey here asked households about expenditures, but the high non-response rate means the results cannot be used.
Figure 2: Households who consider themselves poor are less likely to evaluate their situation positively


Current legal status of land, houses and residents

Older novostroiki have been established and legalized in accordance with a well established and logical sequence of legal steps. First, agricultural land is redesignated as land for settlement and transferred to the city. Second, land plots are allocated and owners register their rights in Gosregister. Third, owners build houses and register them in Gosregister after acceptance by the city. Finally, the owners and their families register as legal residents (i.e., they obtain “propiski”).

Household registration (propiska) is important because social benefits and access to some social services are provided according to place of permanent residence. People who are not registered as permanent residents are denied access to social protection programs (i.e., unemployment benefits, |goti (exemptions/discounts for utilities for certain categories of people), the Unified Monthly Benefit (for low-income households), social allowances, etc.). They may also be denied access to basic healthcare and may experience difficulties in enrolling their children in school.

As land grabbing has become more common, households involved are more affected by legal uncertainties. The table below summarizes both the “regular” (or original) and the “irregular” (more recent) process for novostroiki development. In newer irregular novostroiki, households occupy land and build on it before the land’s use is changed and before the household acquires any legal claim to the land. This is a risky process for households which may invest considerable resources in building a house only to be evicted. Housing built before land has been officially allocated is especially likely to not be accepted by the city.

---

6 In some cases houses being built have been torn down. See for example reports of tearing down 132 houses under construction in Kok-Zhar on March 1, 2007. http://www.24.kg/community/2007/03/27/47434.html
Table 7: Regular and Irregular Process for Novostroiki Establishment

<table>
<thead>
<tr>
<th><strong>“Regular” process for novostroiki establishment</strong></th>
<th><strong>“Irregular” process for novostroiki establishment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Central Government (Prime Minister) issues a decree transferring land from the “agricultural” category to “settlements” category.</td>
<td>- People “grab” or “squat” on agricultural or other land.</td>
</tr>
<tr>
<td>- Bishkek Architectural Authority (BAA) prepares a cadastral plan with the borders of each land plot.</td>
<td>- People build houses illegally (usually not to required standards)</td>
</tr>
<tr>
<td>- Mayor’s office issues a resolution allocating that land plot for house building (Land is allocated to people for 3 years with right of construction).</td>
<td>- Land is transferred to settlement land.</td>
</tr>
<tr>
<td>- Households build house (to required standards).</td>
<td>- BAA prepares a cadastral plan with the borders of each plot</td>
</tr>
<tr>
<td>- Completed house is accepted by Construction control department of the city.</td>
<td>- District administrations allocate land plots to squatters and others</td>
</tr>
<tr>
<td>- Households re-register ownership rights on land plot in Gosregister after completion of house.</td>
<td>- Households allocated land should register plot in the GosRegister.</td>
</tr>
<tr>
<td>- Owner should register himself and his family with the Ministry of Internal Affairs (“propiska”).</td>
<td>- Completed house is accepted by Construction control department of the city.</td>
</tr>
</tbody>
</table>

Very few novostroiki inhabitants live on lots registered in the Gosregister. Based on official data, on average fewer than 8% of all lots (and 10% of allocated lots) in novostroiki founded in 2003 or earlier have been registered. The highest share of registered lots is found in Madaniyat (12.2%) while six of the newest novostroiki have no registered lots. Interestingly, households reported much higher rates of registration in the survey with 35.9% of households reporting their land plot was registered in the Gosregister, while 22.3% reported it was not and the remainder either did not know or did not respond. Although some of the discrepancy between the official statistics and household responses may reflect lack of knowledge of ownership status by renters, the share of renters is not enough to fully explain the difference. The difference between the survey responses and official statistics likely reflects confusion by households as to what registration of land in Gosregister actually refers to. Households may have some documents relating to the land plots and believe they are registered, while actually lacking the official registration. Additionally, land plots/houses that have been registered once may be sold without re-registration in order to avoid payment of a series of fees required for registering the transaction.

Few novostroiki dwellings are registered in the Gosregister. Official data from the Bishkek Mayor’s office suggests that by end 2004 only 18.5% of all houses built in novostroiki area had been accepted by the city’s construction department. This acceptance is a prerequisite for registering the building in the Gosregister. Additionally, documents allowing construction existed for fewer than half the lots (15,000 out of 28,000 lots lacked such documents). The household survey found strikingly different results, however, as about 62% of households surveyed reported that their dwelling were registered, while 19% reported their dwellings were not registered and the remainder either didn’t know or did not respond. The large difference

---

7 Krasin, 2005.
between official statistics and household perception suggests that households have little understanding of the process for registering houses.

**About three-quarters of households report they are registered to live in their dwelling.** According to the BCSI survey, 76.6% of households have a residence permit for their houses, while 22.7% did not. Most households (60%) not registered in their current dwelling were registered at another address. One-fifth of unregistered households stated they were not registered because their house had not been accepted. The high-share of registered households likely resulted from the 2001 decisions to extend temporary registration to novostroiki residents for a period of up to 3 years regardless of housing status and to allow a number of dwellings to be accepted by the city even though they didn’t meet seismic and other codes and standards. In late 2004, the three year limitation was lifted although households still need to be able to demonstrate their rights to the lot in order to register.8

**Living Conditions in Novostroiki Areas**

**Housing**

Novostroiki dwellings are primarily self-constructed, built from adobe or clay, 2-3 rooms in size and roofed with asbestos shingles. The BCSI survey found that nearly half (48.9%) of houses are built from «saman» (an adobe-type blend of clay and straw) and an additional 11.2% are built from clay. Only 31.2% of houses are built from the more permanent bricks. Virtually all novostroiki (96.3%) are roofed with asbestos shingles.

The majority of households live in owner-occupied individual houses on lots smaller than 500 square meters. About three-quarters of households live in a separate, permanent, house. An additional 19% of households live in temporary dwellings, while 4% live in part of a house. The overwhelming majority (87%) of households own their dwellings with 12% reporting they rent. Nearly two-thirds of households occupy lots under 500 square meters although about one-quarter of households surveyed reported lot sizes of 800 square meters or more.

Housing conditions vary significantly among the different novostroiki. The table below summarizes the key indicators for housing conditions. Kolmo stands out as an area where housing conditions are good as everyone lives in a separate house, no one rents, no one identifies their housing conditions as poor, the share of houses built of saman or clay is relatively small, the share of large houses (three rooms or more) is high and density levels are low. On the other end of the spectrum are places like Archa-Beshik, Ala-Too and Kasym, where households are less likely to live in a separate house, are more likely to rent, are more likely to evaluate their housing conditions as poor, and where smaller shares of households live in the three-room

---

8 Prikaz 159, Ministerstvo Iustitsii, 16/11/2001 and Postanovlenie pravitel'stva kyrgyzskoi respubliki “ob Utverzhdenii Polozenienia o pravilakh registratsii I smiatii grazhdan Kyrgyzskoi Respubliki s registratsionnogo ucheta po mestu zhivel'stva I mestu prebyvaniia (n 886, 4/12/2004).
houses of the better off. Ala-too and Ak-Tilek also have the highest percentage of one-room houses and Ala-too has the highest average number of people per room.

Table 8: Housing Conditions in the Different Novestroiki

<table>
<thead>
<tr>
<th>Area</th>
<th>% HHs in separate house</th>
<th>% HHs renting</th>
<th>% HHs evaluating housing conditions as poor</th>
<th>% houses built of saman or clay</th>
<th>% three-room houses</th>
<th>% one-room houses</th>
<th>Ave. # people per room in one-room house</th>
<th>Ave. # people per room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kok-Jar</td>
<td>90.8</td>
<td>10.8</td>
<td>7.7</td>
<td>47.7</td>
<td>55.4</td>
<td>3.1</td>
<td>4.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Ak-Bosogo</td>
<td>90.7</td>
<td>16.0</td>
<td>5.3</td>
<td>72.0</td>
<td>38.7</td>
<td>5.3</td>
<td>3.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Ak-Orgo</td>
<td>61.0</td>
<td>13.0</td>
<td>17.0</td>
<td>55.0</td>
<td>40.0</td>
<td>2.0</td>
<td>5.0</td>
<td>1.6</td>
</tr>
<tr>
<td>Ak-Tilek</td>
<td>85.7</td>
<td>9.5</td>
<td>0.0</td>
<td>76.2</td>
<td>38.1</td>
<td>9.5</td>
<td>4.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Ala-Too</td>
<td>59.5</td>
<td>16.7</td>
<td>21.4</td>
<td>52.4</td>
<td>33.3</td>
<td>11.9</td>
<td>5.4</td>
<td>1.9</td>
</tr>
<tr>
<td>Archa-Beshik</td>
<td>67.4</td>
<td>10.5</td>
<td>36.8</td>
<td>76.8</td>
<td>43.2</td>
<td>5.3</td>
<td>4.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Bakai-Ata</td>
<td>63.2</td>
<td>13.2</td>
<td>15.8</td>
<td>57.9</td>
<td>42.1</td>
<td>2.6</td>
<td>2.0</td>
<td>1.6</td>
</tr>
<tr>
<td>Kasym</td>
<td>50.0</td>
<td>9.1</td>
<td>22.7</td>
<td>40.9</td>
<td>31.8</td>
<td>0.0</td>
<td>n/a</td>
<td>1.7</td>
</tr>
<tr>
<td>Kolmo</td>
<td>100.0</td>
<td>0.0</td>
<td>0.0</td>
<td>40.0</td>
<td>74.3</td>
<td>0.0</td>
<td>n/a</td>
<td>1.0</td>
</tr>
</tbody>
</table>


Environment

A number of novestroiki areas are located in environmentally hazardous places. For example, Bakai-Ata is located near the ash dumps for the Bishkek Thermal Energy Station (TES), which means even slight breezes blow ash through the area coating houses and contributing to health problems for residents. The Ala-Too novestroiki area was built near, and has actually encroached upon, a sarcophagus built to entomb cattle that died of anthrax in the 1940s. The threat posed to public health increases from day-to-day as the sarcophagus disintegrates. Yet another novestroiki area (Kelechek) was built close to a concrete plant. Residents suffer from the resulting air pollution. Finally, a series of novestroiki regions (Altyn-Beshik, Kolmo, Ak-Bosogo, Aska-tash, Burdinsky, Aktilek) located in southern Bishkek are regularly flooded as a result of a high water table and non-functioning drainage systems. Seismic activity poses a threat to novestroiki construction in seismic zones, most notably in Ala-Archa, especially since houses are self-built and often fail to meet building codes and standards.

"I believe that ash is the main problem facing Bakai-Ata. We have children. There are, for example, 1000 school children. If we say that children are our future, then they will not have good health and we will not have a healthy generation. Bakai-Ata is transformed into a dark-grey rayon every time the wind blows...."

Bakai-Ata focus group participant

Drainage

Drainage problems are widespread in the north of the city. Novostroiki developed in areas where the groundwater level is very close to the surface experience the greatest problems, especially during the fall and winter when the water table rises. Many agricultural fields originally had open or underground land drainage infrastructure; however the locations of these systems may no longer be known due to the collapse of the state and collective farms, which kept the information. In the northern part of the city, however, agricultural lands were not drained. Consequently, the level of shallow ground water in these areas averages only one-half meter below the surface.

Many novostroika residents ignored the existing drainage systems, which further exacerbated problems. In some cases houses were built on the tops of manholes and in others drainage systems were used for greywater. Novostroiki built on agricultural fields that used a special deep underground drainage system to allow for the structural loadings from agricultural machinery are particularly at risk for problems. Water saturation damage ranges from damage to dwelling foundations, sanitation, and roads while increased standing water provides potential areas for the spread of such infectious diseases as malaria. Additionally, construction of drainage after construction of housing may be costly and difficult.

Access and Quality of Basic Infrastructure Services

Water

Novostroiki residents in even the best served novostroiki areas lag far behind other Bishkek residents in terms of access to water. The household coverage of water supply in Bishkek is estimated by the Bishkek Water Company (BVK) to be approximately 80-85%. The majority (if not all) the remaining 15-20% unserved are in the novostroikas and these are concentrated in a few particularly poorly served areas, especially novostroikas around the market “Dordoi” such as Dordoi, Tendik, Kalys-Ordo and Ak-Bata, as well as the more recently established novostroiki (see Annex 1 map). The table below shows water supply coverage based on the BCSI survey results. When these results are compared with OGUKS data large differences emerge as the survey reports substantially fewer households supplied. The large differences likely results from the fact that OGUKS data is based on the construction of secondary mains in the area whereas results from the household survey data show the share of households connected to the water

"The key problems of the novostroiki are directly related to the absence of infrastructure. Such issues have been addressed for many years and until now have not been fully solved. When resolving problems with electricity, water (drinking and irrigation), roads, schools, kindergartens, medical clinics, one can solve social and economic tasks. The number of novostroiki is increasing. The Government should pay attention to this and solve novostroiki problems on the state level."

-Archa-Beshik focus group participant

10 OGUKS stands for the Public-State Department of Capital Construction (Bishkek City). OGUKS is responsible for infrastructure construction in novostroiki.
supply network.\textsuperscript{11}

Table 9: Household Access to Piped Water Varies Substantially among Regions

<table>
<thead>
<tr>
<th>Novostroika area</th>
<th>% HHs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kok-Jar</td>
<td>81.5</td>
</tr>
<tr>
<td>Ak-Bosogo</td>
<td>44.0</td>
</tr>
<tr>
<td>Ak-Orgo</td>
<td>42.0</td>
</tr>
<tr>
<td>Ak-Tilek</td>
<td>71.4</td>
</tr>
<tr>
<td>Ala-Too</td>
<td>66.7</td>
</tr>
<tr>
<td>Archa-Beshik</td>
<td>35.8</td>
</tr>
<tr>
<td>Bakai-Ata</td>
<td>13.2</td>
</tr>
<tr>
<td>Kasym</td>
<td>59.1</td>
</tr>
<tr>
<td>Kolmo</td>
<td>88.6</td>
</tr>
</tbody>
</table>


Households commonly have their own water supply source and this has increased since 2002. As shown in Table 10, the majority of households (86\% in 2005) have either standpipes in their yards (62\%) or water connections in the house (24\%). On the main roads, households tend to have yard connections, whereas in the smaller streets, households are more likely to use communal standpipes. Only 8\% of households surveyed collect water from public stand posts. The distance to these standpipes is generally less than 200 meters although some households have to walk up to 500 m. Imported water (carried in tanks) and water from open reservoirs is only used by less than 2\% of residents. Comparison of households surveyed in 2002 who were resurveyed in 2005 suggests that almost 10\% of households dependent on water trucks gained access to piped water during the intervening three years.

Table 10: Types and Location of Water Supply Facilities

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yard standpipe</td>
<td>52</td>
<td>62</td>
</tr>
<tr>
<td>In-house connection</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Public standpipe</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Transported water</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Other (draw well, borehole, etc.)</td>
<td>&lt;5</td>
<td>&lt;4</td>
</tr>
</tbody>
</table>


Most households individually supplied with water reported it was reliably supplied. The majority (78\%) of households supplied with water in their yard or with internally piped water reported water cut offs no more than several times a year (although no indication of the length of cut off was provided). However, the frequency of regular interrupts in water supply in some novostroikis is higher than in others. In general, where residents have access to water supply connections, they report that the quality of service is reasonably good in terms of quality

\textsuperscript{11} Water supply problems are particularly apparent in Ak Bosogo, where drinking water problems are of top priority for local residents due to water shortages for the past fifteen years. In Ak Bosogo and Ak Orgo, residents also expressed their concern about the lack of water for irrigating plants for urban greening and kitchen gardens. In Ak Orgo households use tap water to irrigate. Reportedly, high residual chlorine levels are found in novostroikis located close to the treatment plant in Ak Orgo. (Hydrophil 2005).
(although this cannot be quantified as there is no routine physio-chemical and bacteriological testing of the water by Sanitary and Epidemiological Services at the point of consumption).

**Normative water consumption likely understates actual consumption.** Water consumption data is very limited due to lack of metering. Although data are not available for Bishkek, Osh water uses the following as normative household consumption:\(^\text{12}\)

- 35 liters per capita per day for houses using street standpipes
- 60 liters per capita per day for houses using yard connections,
- 100 liters per capita per day for house connections for houses without other services (novostroiki are not connected to hot water supply, gas, and most of the households are not connected to sewerage)
- 170 liters per capita per day for units without hot water supply but with sewerage

However, these normative consumption figures may be exceeded considerably due to the fact that there is no control over the use of standpipes or yard connections and many novostroiki communities originate from rural areas that traditionally use water for irrigation. As new housing construction has filled in irrigation channels, residents resort to use of piped water for irrigation. Water is also used for making adobe clay bricks. This excessive use of piped water places an unnecessary burden on the water utility and contributes to water shortages.

**Many households do not pay for water.** In the household survey, nearly half (45%) of respondents found it difficult (or refused) to answer the question about payment for water use. Those who did respond were fairly evenly distributed between those paying less than 20 soms, those paying 21-80 soms, and those paying more than 80 soms. The wasteful use of water is partly due to the fact that there is no culture of paying for water and without metering the Bishkek Water Company has no mechanism for making consumers of water accountable for their use of water.

**Sanitation and solid waste**

**Households overwhelmingly use pit-latrines as city sewerage does not extend to novostroiki areas.** Nearly all households surveyed (97%) use pit-latrines located in the yard. Few households have provided hand washing facilities near their pit-latrines, which means many people do not wash their hands after using the latrine, thus increasing the risk of gastro-enteritis and other sanitation-related diseases. On the other hand, fewer than 3% of households report sharing toilets, which is a positive factor in prevention of epidemics.

**Although not served by city trash collection services, waste collection in novostroiki areas has improved during the past three years.** The TOSs in conjunction with the communities have organized waste collection. As the table below shows, two-thirds of respondents report waste is picked up by truck, usually once per week. This is a considerable improvement from the situation in 2002 when only 42% of households reported waste collection by truck. It should

\(^{12}\) Although some fluctuations are expected from one city to another, it is assumed that the values in Bishkek are similar as they originate from the same design standard.
be noted, however, that despite improvements one-third of those surveyed either dumped, burned or buried their waste. The TOSs report that not all households participate in waste collection and the collection fee ratio ranges from 40 to 70%. More recent novostroikis are generally less organized than older novostroiki, but even some established novostroiki such as Ak Tilek, Ala Too, Archa Beshik still have fairly poorly developed solid waste collections systems mainly due to the problem of collecting fees from local residents.

**Table 11: Waste collection has improved since 2002 (%)**

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picked up by truck/ container, of which:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once per week</td>
<td>78</td>
<td>78</td>
</tr>
<tr>
<td>Once per month</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>Once per quarter/don’t know</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Pile trash (on street)</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Burn</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Dump</td>
<td>22</td>
<td>15</td>
</tr>
</tbody>
</table>


**Electricity**

**Electricity reliability lags far behind access.** More than 99% of households surveyed had access to electricity in 2005, however, one-quarter of households reported power outages once per month or more. This is because electrification of the novostroiki areas has not been completed. According to the Master Plan 1,082 km of power lines were planned and currently 853 km are laid; 168 km of estimated 218 km of high voltage lines; 317 of 395 installations of urban complex transformation substations (UCTS) are launched.

**Transportation**

**Novostroiki residents rely heavily on public transportation.** About 92% of BCSI survey respondents report regular use of public transportation. Route taxicabs are the most popular type of transport (83.4%). Trolleybuses serve only a few novostroiki communities and are by far less popular (8.7%). A few respondents drive their own vehicles or go by private taxies. One of the most pressing problems for novostroiki is the absence of surfaced roads. According to the General Plan 441 km of roads in novostroiki should have been made, but only 24 km of roads have been paved with an additional 259 km covered with gravel. Respondents primarily use public transportation to go to work (72.2%) or for shopping (12%). About three-quarters of respondents report paying for transportation. About 16% of respondents stated they could not afford to pay for public transportation.

**Infrastructure Access and Quality by Location**

**Access to infrastructure services and service quality vary by location.** Kolmo residents are best off with universal access to regularly collected solid waste and with water sources in the yard or in the house (see table below). Water and power are regularly supplied. In contrast, Ala-
Too, Archa-Beshik and Ak-Tilek residents have little access to solid waste collection, although somewhat better coverage of water. Ak-Tilek residents are especially likely to lose water and power, suggesting an overall problem with service provision in this area.

<table>
<thead>
<tr>
<th>Table 12: Infrastructure Service Access and Coverage by Novostroika.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of HHs regularly using public transport</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Kok-Jar</td>
</tr>
<tr>
<td>Ak-Bosogo</td>
</tr>
<tr>
<td>Ak-Orgo</td>
</tr>
<tr>
<td>Ak-Tilek</td>
</tr>
<tr>
<td>Ala-Too</td>
</tr>
<tr>
<td>Archa-Beshik</td>
</tr>
<tr>
<td>Bakai-Ata</td>
</tr>
<tr>
<td>Kasym</td>
</tr>
<tr>
<td>Kolno</td>
</tr>
</tbody>
</table>


Education and health services in Novostroiki areas

Even the oldest of the novostroiki areas do not have enough schools. The table below shows the share of households where children attend schools in the novostroika. This ranges from a low of 28% of households in Kok-Jar to a high of 87% of households in Ak-Bosogo. On average, only about half of children are able to attend primary or secondary school in their own region. In more recently established novostroiki areas, access to schools is considerably worse as fewer schools have been built. About one-quarter of households responded that it was difficult to get children to school.

"We've been living in the novostroika for three years now. Our children have grown up: those who were six when we settled are now nine years old. Since there is no school in the novostroika, our children have not attended school. The situation now is that they have to study with six-year old children. This is a psychological problem for a child. New children keep being born; this is a natural process that we cannot stop. You should understand that."

-Kalys-Ordo focus group participant

"Our children study in different schools. We beg school administrators to accept our children, as if we were aliens from another country. Although we are thought to live in the capital city, our children are deprived of education."

-Kara-Jigach focus group participant
Table 13: Even the Oldest Novostroiki Areas Lack Sufficient Schools

<table>
<thead>
<tr>
<th>Name of Novostroika</th>
<th>% of HHs with children studying in schools in novostroika area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kok-Jar</td>
<td>28%</td>
</tr>
<tr>
<td>Ak-Bosogo</td>
<td>87%</td>
</tr>
<tr>
<td>Ak-Orgo</td>
<td>58%</td>
</tr>
<tr>
<td>Ak-Tilek</td>
<td>71%</td>
</tr>
<tr>
<td>Ala-Too</td>
<td>54%</td>
</tr>
<tr>
<td>Archa-Beshik</td>
<td>51%</td>
</tr>
<tr>
<td>Bakai-Ata</td>
<td>64%</td>
</tr>
<tr>
<td>Kasym</td>
<td>72%</td>
</tr>
<tr>
<td>Kolmo</td>
<td>40%</td>
</tr>
</tbody>
</table>


The shortage of schools in novostroiki areas has resulted in significant overcrowding in the existing schools. The table below provides information about planned and actual enrollments in eleven novostroiki schools. Clearly, the novostroiki schools are very crowded. Actual enrollments exceed planned capacity by a factor of nearly two requiring pupils to study in shifts. Although in the past it was difficult to attract teachers to novostroiki schools, the introduction of a 300 som bonus (or about one-third of average teacher salaries) has considerably reduced teacher vacancies, which average about 6% for the novostroiki schools shown below.

Table 14: Schools Built to Serve Novostroiki Areas are very Crowded

<table>
<thead>
<tr>
<th>Secondary School / Primary School</th>
<th># of institution</th>
<th>Location</th>
<th>Planned capacity</th>
<th>Actual enrollment</th>
<th>% vacant teaching positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS</td>
<td>#77</td>
<td>Akorgo</td>
<td>754</td>
<td>1,252</td>
<td>7</td>
</tr>
<tr>
<td>SS</td>
<td>#78</td>
<td>Kolmo</td>
<td>630</td>
<td>1,162</td>
<td>0</td>
</tr>
<tr>
<td>SS</td>
<td>#79</td>
<td>Archabeshik</td>
<td>840</td>
<td>1,690</td>
<td>4</td>
</tr>
<tr>
<td>SS</td>
<td>#80</td>
<td>Dzhal-Archatbeshik</td>
<td>320</td>
<td>686</td>
<td>6</td>
</tr>
<tr>
<td>SS</td>
<td>#81</td>
<td>Akbogos</td>
<td>740</td>
<td>1,751</td>
<td>0</td>
</tr>
<tr>
<td>SS</td>
<td>#82</td>
<td>Alato</td>
<td>350</td>
<td>1,107</td>
<td>7</td>
</tr>
<tr>
<td>SS</td>
<td>#83</td>
<td>Kasim</td>
<td>750</td>
<td>1,310</td>
<td>22</td>
</tr>
<tr>
<td>PS</td>
<td>#84</td>
<td>Akorgo</td>
<td>120</td>
<td>213</td>
<td>0</td>
</tr>
<tr>
<td>SS</td>
<td>#85</td>
<td>Bakai-Ata</td>
<td>724</td>
<td>779</td>
<td>10</td>
</tr>
<tr>
<td>SS</td>
<td>#21</td>
<td>Enesai</td>
<td>128</td>
<td>596</td>
<td>0</td>
</tr>
<tr>
<td>PS</td>
<td>#2</td>
<td>Kokjar #2</td>
<td>360</td>
<td>398</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td></td>
<td><strong>5,716</strong></td>
<td><strong>10,944</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

Source: Krasin, 2005.
Health

Nearly half (45%) of respondents reported using health services during the preceding six months. Of those using health services, 37% used the Family Group Practice to which they were assigned and another 35% used a clinic (without a FGP). About 15% of those using health services did so for child immunizations. Major reasons for refusing medical assistance include: self-treatment (40%) and cost health services (22%). According to respondents, 95% of children are in average or good health.

Crime

Crime or violence is relatively common in novostroiki areas. About one in twenty households reported experiencing crime or violence during the past six months. At the same time, about 13% of households believed their neighborhoods to be unsafe. Participants in focus groups, however, did not raise crime/violence as a priority issue to be addressed.

Ranking Novostroi on Multiple Indicators

Some Novostroi are better than others. The table below summarizes survey results for the nine novostroi on important indicators of household demographic composition, its socio-economic status, the legal status of the household, their housing conditions, access to infrastructure, and perception of safety. The results were then used to rank the novostroi areas from best to worst on each. Next a simple average rank was computed for each novostroi. Kolmo, which ranked as “1” (or best) on 16 of the 24 indicators, also scored best overall (average rank: 2.08). Ala-Too (average rank: 6.54 out of a possible 9) scored worst overall. The large difference in average scores between the two is because Kolmo is a place where not only are residents better off in terms of demographic composition and socio-economic status (all of which are linked to poverty in Kyrgyz), but also because households had better legal rights, better housing conditions and better access to infrastructure. In Ala-Too the opposite was true. The remaining novostroi fell somewhere in-between the two and from best to worst were as follows: Kok-Jar (4.33), Ak-Orgo (4.67), Ak-Tilek (4.71), Kasym (5.08), Bakai-Ata (5.58), Ak-Bosogo (5.63) and Archa-Beshik (5.79)
Table 15: Differences among Surveyed Novestroiki on Key Indicators

<table>
<thead>
<tr>
<th>Demographic Composition</th>
<th>Kok-Jar</th>
<th>Ak-Bosogo</th>
<th>Ak-Orgo</th>
<th>Ak-Tilek</th>
<th>AlaToo</th>
<th>Archa-Beshik</th>
<th>Bakai-Ata</th>
<th>Kasym</th>
<th>Kolmo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ave. HH Size</td>
<td>4.20</td>
<td>4.20</td>
<td>4.84</td>
<td>4.57</td>
<td>4.69</td>
<td>4.33</td>
<td>4.50</td>
<td>4.59</td>
<td>3.86</td>
</tr>
<tr>
<td>% children 0-17</td>
<td>40</td>
<td>39</td>
<td>37</td>
<td>36</td>
<td>40</td>
<td>39</td>
<td>43</td>
<td>46</td>
<td>33</td>
</tr>
<tr>
<td>% working age population</td>
<td>59</td>
<td>60</td>
<td>62</td>
<td>63</td>
<td>59</td>
<td>59</td>
<td>56</td>
<td>53</td>
<td>64</td>
</tr>
<tr>
<td>% of HHs from village</td>
<td>75</td>
<td>92</td>
<td>40</td>
<td>95</td>
<td>57</td>
<td>88</td>
<td>76</td>
<td>73</td>
<td>69</td>
</tr>
<tr>
<td>% female headed HH</td>
<td>11</td>
<td>20</td>
<td>18</td>
<td>10</td>
<td>14</td>
<td>13</td>
<td>13</td>
<td>9</td>
<td>17</td>
</tr>
</tbody>
</table>

| Socio-economic status   |         |           |         |          |        |              |           |       |       |
| % adults w. higher/ incomplete higher ed. | 68      | 54        | 70      | 85       | 59     | 45           | 57        | 52    | 78    |
| % adults not working or looking for work | 19      | 52        | 12      | 32       | 13     | 41           | 20        | 15    | 16    |
| median monthly per capita income (Soms) | 800     | 400       | 1000    | 567      | 803    | 1000         | 838       | 850   | 752   |
| % HHs considering themselves poor | 23      | 21        | 28      | 10       | 52     | 65           | 37        | 27    | 11    |
| % HHs evaluating their situation positively | 75      | 83        | 70      | 76       | 31     | 47           | 39        | 55    | 91    |

| Legal Status            |         |           |         |          |        |              |           |       |       |
| % HHs w. propiska       | 85      | 73        | 75      | 86       | 60     | 78           | 71        | 77    | 89    |
| % HHs w. registered house | 75      | 77        | 38      | 76       | 57     | 63           | 34        | 73    | 94    |

<p>| Housing conditions      |         |           |         |          |        |              |           |       |       |
| % HHs living in individual house | 91      | 91        | 61      | 86       | 60     | 67           | 63        | 50    | 100   |
| % HHs renting            | 11      | 16        | 13      | 10       | 17     | 11           | 13        | 9     | 0     |
| Average number people per room | 1.3     | 1.5       | 1.6     | 1.8      | 1.9    | 1.5          | 1.6       | 1.7   | 1.0   |
| % houses larger than 3 rooms | 55      | 39        | 40      | 38       | 33     | 43           | 42        | 32    | 74    |
| % houses built of saman or clay | 48      | 72        | 55      | 76       | 52     | 77           | 58        | 41    | 40    |
| % HHs evaluating housing as poor | 8       | 5         | 17      | 0        | 21     | 37           | 16        | 23    | 0     |</p>
<table>
<thead>
<tr>
<th>Infrastructure Services</th>
<th>Kok-Jar</th>
<th>Ak-Bosogo</th>
<th>Ak-Orgo</th>
<th>Ak-Tilek</th>
<th>Ala-Too</th>
<th>Archa-Beshik</th>
<th>Bakai-Ata</th>
<th>Kasym</th>
<th>Kolmo</th>
</tr>
</thead>
<tbody>
<tr>
<td>% HHs w. water source in yard or house</td>
<td>86</td>
<td>55</td>
<td>95</td>
<td>81</td>
<td>86</td>
<td>94</td>
<td>66</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Of these, % HHs reporting water cut offs once per month or more</td>
<td>30</td>
<td>2</td>
<td>15</td>
<td>71</td>
<td>35</td>
<td>33</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>% HHs reporting power outages once per month or more</td>
<td>35</td>
<td>39</td>
<td>20</td>
<td>95</td>
<td>26</td>
<td>13</td>
<td>11</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>% HHs using garbage bins for waste disposal</td>
<td>100</td>
<td>92</td>
<td>91</td>
<td>14</td>
<td>2</td>
<td>8</td>
<td>97</td>
<td>82</td>
<td>100</td>
</tr>
<tr>
<td>Of these, % reporting trash pick ups at least once per week</td>
<td>82</td>
<td>43</td>
<td>86</td>
<td>100</td>
<td>100</td>
<td>38</td>
<td>100</td>
<td>83</td>
<td>100</td>
</tr>
<tr>
<td>Crime</td>
<td>% HHs that think neighborhood is safe</td>
<td>80</td>
<td>88</td>
<td>92</td>
<td>90</td>
<td>79</td>
<td>89</td>
<td>87</td>
<td>91</td>
</tr>
</tbody>
</table>

Summary of Main Findings

Novostroiki are a large and growing problem for Bishkek. One in four city residents live in novostroiki and the number is growing from day to day. Novostroiki can no longer be considered as a special part of the city that can be addressed separately. Instead, more than fifteen years after the establishment of the first novostroiki, they have become an integral part of the city’s fabric and the most important source of housing for migrants seeking better opportunities for their families. Novostroiki growth has quickened in recent years in part due to the March 2005 change in government and the adoption of a Land Code in 1999, which entitles citizens to lots for housing construction.

Novostroiki residents are more diverse than most people think. Incomes and living conditions vary greatly among novostroiki, as does access to, and quality of, basic infrastructure, health and educational establishments. Primarily rural migrants, novostroiki residents build their own houses with the help of the community (ashar).

Better off novostroiki residents live in superior houses and have access to more services. Ranking novostroiki on a range of indicators showing households socio-economic status, demographic composition, legal status, housing conditions and access to infrastructure services finds that places better off on one indicator are often better off on other indicators.

Analysis of the survey and focus group findings suggest novostroiki residents encounter difficulties in four broad areas.

- **Environmental hazards.** Ash, poor drainage, flooding and exposure to other environmental hazards increase health problems and threaten agricultural livelihoods for residents in some novostroiki.
- **Access to basic infrastructure:** Even residents of the oldest novostroiki and relatively well off lack access to clean water, adequate roads, public transport, and reliable electricity. Although the survey did not cover more recently established novostroiki, it is clear from observation that infrastructure deficit is more serious for newer settlements.
- **Access to basic educational and social services.** Although a high percentage of novostroiki residents are children, access to schools is limited and children study in either overcrowded neighborhood schools or commute to more distant municipal schools. Preschools are not available.
- **Registration of land, housing and residents:** High fees, poor quality construction, difficulty in collecting the required documentation all contribute to the non-registration of land and housing without which households cannot fully use their property. Households who cannot document their rights to land plots are at a particular disadvantage as they are not able to register their residency (i.e., obtain a propiska). Unregistered residents cannot vote or access social benefits, have difficulty enrolling children in school or in registering for military service.
3. WHAT IS BEING DONE IN NOVOSTROIKI AREAS?

During the past 15 years, the government and community groups (NGOs, residents, often with support from donors etc.) have all been actively engaged in improving living conditions in novostroiki areas.

**Government initiatives**

The government (central and local) has played an active role in novostroiki areas. The government is particularly important as it owns the land, allocates it, determines land use, registers land, housing and residents, and prioritizes, finances and implements new investments. That said, the government’s role has been largely reactive, not proactive-- the government responds to the evolving situation in the novostroiki, but is not anticipating how the situation may evolve in the future in order to develop long-term strategies to address.

The major government initiatives include:

*Establishment of OGUKS.* In 1991, Bishkek city established the Public-State Capital Construction Department in response to demands from the first wave of novostroiki settlers that appropriate budget be allocated for roads, schools, and other required capital investments in the novostroiki. For the first time the government established a structure jointly with community representatives, staffed it largely with the most active novostroiki leaders, and provided it with control over government resources. OGUKS continues to function and remains staffed primarily by novostroiki activists from the first wave. One question raised by the current structure is to what extent more recent novostroiki settlers are included in, and have access to, OGUKS. A second question has to do with the quality of OGUKS supervised works, which reportedly often fail to meet construction standards and are consequently not accepted by the relevant city authorities. As a result, they remain “hanging in the air” without appropriate management and maintenance.13

*Formal incorporation of novostroiki areas into city.* As new novostroiki areas are developed, they are also transferred into the formal control of the city. This is an important first step in their eventual regularization and legalization. However, as this study has shown, the majority of lots and houses in even the oldest novostroiki settlements remain unregistered, which means they have not been fully legalized.

*State obligation to provide land for housing to households without land.* In 1999, the government adopted a new Land Code, which provides citizens with the legal entitlement to land for housing construction. As discussed earlier, this has become the basis for recent waves of squatters to occupy land in order to demand plots be allocated to them. This is likely to be an increasingly large problem as new generations of citizens will not have benefited from earlier privatization efforts thus will increasingly be entitled to land plots for housing construction.

13 Krasin, 2005
Allowing households to obtain residency permits on lots regardless of the status of the houses on those lots. The 2001 and 2004 changes in residency permits (propiski) regulations enabled novostroiki households to register as residents regardless of the conditions of their housings. The ability to register as a resident is important as access to different social services and benefits is tied to registration. Novostroiki residents who are not able to establish their claim to a lot, however, are still not able to register as residents. This particularly affects people living in more recently established novostroiki.

A summary of key legislation is attached as Annex 2.

The great number of central and local government entities working within novostroiki areas creates many areas of overlap and lack of clarity as to roles and responsibilities. Government actors span all levels of government from the lowest, TOSs to Territorial-Block Local Self-Government (TBLSGs), rayons, the city and the central government. In addition, three joint stock companies (Bishkek Enterprise of Heating Networks, Kyrgyztelecom and Severelectro) are also involved. Annex 3 provides a summary of the different entities and their responsibilities.

The multiplicity of institutional actors and responsibilities create difficulties for novostroiki residents, which are especially apparent in the following three areas.

Land allocation/administration/management. The Bishkek Chief Architects Office (BCAO), Gosregister, Bishkek City Administration, Rayon Administrations and TBLSGs all participate in different areas of allocation, administration and management. In some sub-areas overlapping responsibilities create significant difficulties. For example, the BCAO and Gosregister are both involved in determining land plot borders. Respondents also noted the problems that arise when BCAO unilaterally modifies the General Plan for novostroiki areas without consulting with local authorities.

Registering citizens (necessary for access to social services and social protection programs). There are too many entities involved in population registration, including the TBLSGs, Rayon Internal Affairs offices, military committees (draft registration), Rayon Educational Centers (preschool and school-age children), Social Protection Departments and Employment Centers. Without registration residents cannot access social protection programs, basic healthcare, unemployment payments or even vote.

Capital construction. The city has two capital construction departments, one for novostroiki areas (OGUUKS) and one for the rest of the city (UKS, which also has responsibility for construction within the entire Kok-Jar novostroiki area). UKS is responsible for overseeing construction for all sorts of public investments in infrastructure and public buildings (schools, hospitals, etc.) except for roads, which are the responsibility of the Road Department. OGUUKS is responsible for road construction within the novostroiki areas. OGUUKS, UKS and the Roads Department all have some responsibilities for construction quality, as does the State Architectural and Construction Supervision Board.
Community/NGO initiatives

As in other parts of Kyrgyzstan, novostroiki residents frequently join together on a voluntary basis ("ashar") to build houses and other infrastructure. The majority of houses in novostroiki areas have been built using ashar where the owner supplies the materials and family, friends and neighbors supply the labor. Additionally, novostroiki communities often use ashar to carry out local works ranging from drainage improvements to school construction. Donor-financed projects commonly rely on ashar to provide labor for projects to be financed.

Novostroiki communities often provide co-financing for specific infrastructure investments. In the case of telephone services, state funds cover only the telephone stations while all cabling works are paid by customers. In the case of water supply and sewerage, OGUKS pays only for primary and secondary mains, whereas tertiary mains and yard connections are paid for by households.

NGOs, CBOs, and Local Self-help groups are also active in novostroiki areas. They work in a number of areas ranging from small scale infrastructure to public health and employment. Public Association Arysh has worked with residents in novostroiki areas to establish more than 100 self-help groups in novostroiki areas and to train them to more effectively represent the community needs to the government and other donors. They have partnered with OGUKS and donors to carry out infrastructure investments with local residents providing their contributions in cash or labor. The share of funding varies, but on average Arysh and residents together cover about 50% of the project cost and the remainder is covered by OGUKS.

Community-based activities remain limited and substantial scope exists for scaling up. On-going community based activities demonstrate that novostroiki residents are willing to join together to solve problems ranging from home building to infrastructure construction. This is valuable experience to draw on for future novostroiki improvement efforts.
4. WHAT NEXT? STRATEGIC QUESTIONS FOR POLICYMAKERS RESPONSE

Much has been accomplished. Substantial progress has been made in addressing the problems of already established novostroiki. Major achievements include steps to formalize/legalize land, housing and residents, designating funding for infrastructure investments in novostroiki areas, involving communities (through OGUKS and ashar), adjusting the institutional and policy environment, and so forth.

The box below summarizes international lessons learned from urban upgrading experience all over the world. If this framework is used to evaluate the Kyrgyz experience then we conclude that progress has been made in all areas with the possible exception of the last (preventing the growth of new slums).

<table>
<thead>
<tr>
<th>Essential Ingredients of Nationwide Integrated Urban Upgrading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Urban Upgrading consists of physical, social, economic, organizational and environmental improvements undertaken cooperatively and locally among citizens, community groups, businesses and local authorities. It requires:</td>
</tr>
<tr>
<td>1. Demonstrate political will. Both national and local governments must provide the vision, commitment, and leadership required to sustain nationwide upgrading.</td>
</tr>
<tr>
<td>2. Set national and city targets. Set clear targets and ensure public sector accountability by engaging stakeholders in planning and monitoring results.</td>
</tr>
<tr>
<td>3. Put it in the budget. Support urban upgrading as part of core business, nationally and locally.</td>
</tr>
<tr>
<td>5. Ensure open and transparent land markets. Reform closed and opaque land markets which encourage corruption, patronage, and exploitation of the urban poor, as well as constrain capital markets.</td>
</tr>
<tr>
<td>6. Mobilize non-public sector resources. Engage the residents themselves, who have both the ability and the interest in promoting upgrading, and the private sector, which should be engaged as a risk-sharing partner rather than a mere contractor to the public sector.</td>
</tr>
<tr>
<td>7. Prevent the growth of new slums. Facilitate access to land and services by planning realistically for future growth.</td>
</tr>
</tbody>
</table>

...but much remains to be done. Novostroiki residents are disproportionately likely to live on unregistered real estate and to lack permanent residency permits, which denies them access to social protection benefits, complicates access to health and educational services, and limits them from voting and otherwise fully participating in Bishkek civic life. They are likely to live in areas prone to flooding and other environmental hazards, have limited access to basic infrastructure and live in poor quality housing. Novostroiki households are overwhelmingly younger families with children who have migrated from rural places. Novostroiki living conditions vary substantially and poorer novostroiki residents are concentrated in the novostroiki with the worst access to services.

The “big picture”: strategic next steps for policymakers

The most important strategic question facing government officials and policymakers is how to move from reactive policies and programs to a proactive and better integrated strategy. There is no common vision, strategy or consensus regarding what should be done. Current government and non-government interventions are focused on improving conditions in novostroiki after they have been established and are responsive to the problems that have emerged. In this sense these policies and programs are reactive, not proactive. The Government in cooperation with the communities themselves as well as other donors is well positioned to move from the current reactive programs/policies to a comprehensive and inclusive strategy, which would support:

- Better coordination among government entities active in novostroiki areas. Numerous agencies are involved in providing infrastructure, legalizing land and houses, providing residency permits, schools, health services and transport. Interventions are often uncoordinated and responsibilities often overlap (see Annex 4).

- More effective use of existing funding and attraction of new funding sources. Central and city budget funds are insufficient to fully solve the problems of the novostroiki. Donor involvement has been limited. Past experience suggests a strong willingness on the part of communities to pay for infrastructure, either in cash or in-kind. Local ashar-based initiatives, however, are often not scaled up or leveraged by public support despite the existence of some public and donor financing. Thus far the private sector’s role in novostroiki development has been quite limited.

- Enhanced responsiveness to community needs. Investment planning is largely done in a top-down manner, instead of a bottom-up approach reflecting community priorities. Public sector accountability is not clear, and stakeholders may or may not be involved in lanning and monitoring of results.

- Better targeting of government resources, especially to the poorest novostroiki communities. Investments often increase disparities among novostroiki. Some communities lobby more successfully for investments than others. This may be because community leaders are more active, better connected, or simply more knowledgeable about what funding is available and how to get it. As a result there are large differences in living conditions among novostroiki, which reflect differences in investments already made.
• Regular monitoring and evaluation of novostroiki living conditions. Information about novostroiki is incomplete and not even the current number of residents is clear. Existing indicators reflect sector by sector physical investment targets (i.e., km of pipes, roads, number of schools built). There is a need for regular and reliable information that will allow monitoring of outcome and impact (such as distance to water supply or fixed route taxi stop, school enrollments and attendance, etc.).

Government strategy/policy needs to address not only the problems of the existing novostroiki, but also plan for the development of new novostroiki. Novostroiki emerged in response to the collapse of housing supply. The ongoing severe shortage of formal affordable housing coupled with the attractiveness of Bishkek and Osh as economic centers ensure novostroiki will continue to expand for the foreseeable future. Furthermore, the nature of novostroiki development has changed and recent experience suggests land grabbing/squatting is likely to drive future novostroiki developments and exacerbate earlier problems. As yet, there is no strategy for how to handle the continued growth of novostroiki in the future. Accommodating future growth will require identification of new areas and making sure future sub-divisions reserve land necessary for streets, schools, and other essential services, as well as preserving existing drainage systems.

Legal and regulatory framework of activities of the key agencies addressing problems faced by novostroykas around Bishkek
(fundamental legal and regulatory acts)

**Laws of the Kyrgyz Republic**

**Decrees of the President of the Kyrgyz Republic**
5. Decree of the President of the Kyrgyz Republic (as amended by Decrees of the President of the Kyrgyz Republic #251 of August 30, 2000; #302 of October 24, 2000; #57 of February 14, 2001) “On further measures to develop infrastructure of housing estates (novostroykas) and address social and economic problems faced by developers in the Kyrgyz Republic” #179 of 11.07.2000.

**National and local programs**
6. Araket National Poverty Mitigation Program.
8. Ayalzat National Program.
10. Bishkek housing and communal services and fuel and energy complex development Program. Approved by resolution #7 of the board of the City Administration of Bishkek of 29.03.2002.
11. Housing construction program until 2010. Developed by the City Administration of Bishkek in July 2005.
12. Program of social and economic development of novostroykas until 2010 (developed by PSCCB).

**Resolutions and regulations of the Government of the Kyrgyz Republic**
13. Regulation #177 of the Government of the Kyrgyz Republic “On approval of the Regulations on procedure of parceling for individual housing construction purposes” of 06.05.2005.
20. Regulation #177 of the Government of the Kyrgyz Republic “On approval of the Regulations on procedure of allotment of land for individual housing construction” of 06.05.2005.
22. Regulation #394 of the Government of the Kyrgyz Republic “On delegation of authorities to local self-governments in the city of Bishkek” of 26.08.05.

Regulations
25. Regulations “On procedure of allotment of land for individual housing construction purposes”.

Resolutions of the Bishkek city Council and the City Administration of Bishkek
29. Resolution #182 of the Bishkek city Council of people’s deputies “On approval of the Regulations on procedure of delegation of particular functions of rayon administrations of the city of Bishkek to the Councils of territorial community-based self-governments of the city of Bishkek” of 09.07.03.
30. Resolution #183 of the Bishkek city Council of people’s deputies “On approval of the Regulations on procedure of financing and logistical support for implementation of particular functions of rayon administrations of the city of Bishkek delegated by territorial community-based self-governments of the city of Bishkek” of 09.07.03.
31. Resolution #108 of the Bishkek city Council of people’s deputies “On approval of the Regulations on territorial community-based self-governments of the city of Bishkek” of 27.03.1988;
34. Resolution #370 of the City Administration of Bishkek “On further improvement of land relationships in the city of Bishkek” of 23.06.2000.
35. Resolution #7 of the Board of the City Administration of Bishkek “On development of housing and communal services and fuel and energy complex in the city of Bishkek” of 29.03.2002.
38. Resolution #472 of the City Administration of Bishkek “On establishment of the Individual Housing Construction Department under the City Administration of Bishkek” of 10.05.2005.
39. Resolution #27 of the City Administration of Bishkek of 23.01.02.
40. Resolution #196 of the City Administration of Bishkek “On measures to further improve new housing estates in the city of Bishkek” of 23.03.2001.
41. Resolution #662 of the City Administration of Bishkek “On measures to address particular problems associated with individual land development projects” of 10.09.03.
42. Joint #170/170 Resolution of the City Administration of Bishkek and the Bishkek city Council of people’s deputies of 12.12.01 to address social and economic problems faced by land developers.
43. Resolution #819 of the City Administration of Bishkek “On establishment of local self-governments and development of infrastructure in newly established housing estates in the city of Bishkek” of 29.05.05.
44. Resolution #662 of the City Administration of Bishkek “On measures to address particular problems associated with individual land development projects” of 10.09.03.
45. Resolution #191 of the City Administration of Bishkek “On measures to establish order in the process of allotment of land for individual housing construction purposes” of 19.03.2001.
46. Resolution #514 of the City Administration of Bishkek “On regulation of allotment, seizure, reallocation and re-registration of land lots for individual housing construction purposes” of 09.06.1999.
47. Regulations #514 “On allotment, seizure, reallocation and re-registration of land lots for individual housing construction purposes in the city of Bishkek” approved by the Resolution of the City Administration of Bishkek #514 of 09.06.1999.
48. Resolution #170/170 of the Bishkek city Council of people’s deputies of 12.12.01 to address social and economic problems faced by land developers.

Other
49. Itemized republican and municipal budgets (annually approved).
50. Building regulations #31-02-00 KG: Guidelines for design and development of territories adjacent to Issyk-Atinsky fault.

Bishkek Main Architect Office

The main functions and tasks in terms of working with novostroiki are:
- Perform works related to the solution of individual housing construction issues, participate in development of General Plan, plan schemes of apartment block rayons and carry out the development and issuance of individual land plots designs;
- Conduct town planning cadastre and monitoring of lands;
- Prepare drafts of legal documents and documentation for further registration of property rights;
- Implement technical and methodological management of individual housing construction.

Bishkek Main Architect Office interrelates with the following agencies on novostroiki issues:
- Department of individual housing construction
- Department of capital construction under Bishkek City Administration (UKS)
- Public State Department of Capital Construction under Bishkek City Administration (OGUKS)
- State Architectural & Construction Supervision Board Bishkek
- Bishkek City Department of land and registration of property rights (Gosregister)
- Bishkek City Administration and its rayon administrations

Seventeen employees work with novostroiki.

Areas of overlap with other agencies: Bishkek Main Architect Office, Gosregister and Rayon administrations are all involved in land plot disposal and overlap in areas such as determining the location of infrastructure objects (Bishkek Main Architect Office plus rayon administration) and defining land plot borders and registration of legal documents for them (Bishkek Main Architect Office plus Gosregister).

Bishkek City Department of land and registration of property rights (Gosregister)

The main functions are the following:
- conduct technical inventory of immovable property;
- register legal documents for land plot;
- lay out and define the size of plot boundaries in accordance with the General plan.

Gosregister has established a section handling novostroiki with 10 specialists. The main responsibilities of the section are:
- to define the natural size of land plots borders for individual developers in accordance with the General Plan developed by design organizations and agreed with the Bishkek Main Architect Office;
- to register the legal documents for land plots for individual houses (state acts on the right of private ownership for land plot).
Capital construction department (UKS) of Bishkek City Administration

UKS is responsible for capital construction in non-novostroiki areas of Bishkek and in the novostroika of Kok-Jar—capital construction in the other novostroiki are the responsibility of OGUKS. UKS also develops the architectural and planning assignments and engineering and planning assignments for designing and constructing novostroikas and micro-districts. On the base of these, UKS places orders with design institutions, announces and conducts tenders for contractors, and supervises contract implementation. UKS also ensures completeness of micro-districts construction by coordinating among different developers.

UKS works primarily with the following structures:

- Bishkek Main Architect Office
- Design organizations
- State Expertise (Gosekspertiza)
- Exploitation services of the city (gas, sewerage, water supply, etc.)
- Contractors

According to staff schedule there are 57 employees in UKS of whom 42 are technical staff.

Public State Department of Capital Construction under Bishkek City Administration (OGUKS)

OGUKS is responsible for capital construction in novostroiki areas. It was created in accordance with the order of Ministers' Cabinet of the Republic of Kyrgyzstan dated August 7, 1991 # 267-p and Resolution of Presidium of Bishkek City Council of People's deputies dated August 21, 1991 # 285. For the first time the government established a structure jointly with community representatives, staffed it largely with the most active novostroiki leaders, and provided it with control over government resources. OGUKS continues to function and remains staffed primarily by novostroiki activists from the first wave. OGUKS is functionally identical to UKS.

OGUKS interrelates with the following organizations under planning and organization of activities:

- Coordination Council of Democratic Union of Developers of Kyrgyzstan
- Presidium of unite supreme headquarters of developers
- Association «El-Jurtu»
- Department of individual housing construction under Bishkek City Administration
- Bishkek City Administration and its rayon administrations
- TOss, block committees

The following structures support activities of OGUKS related to novostroiki.

---

14 An esplanade surrounded by multi-story apartment buildings, and community, entertainment and business space is planned in the central part of the Kok-Jar novostroika, according to the general development plan; which explains why UKS is responsible for this novostroika.

15 Excluding the novostroika of Kok-Jar.
Bishkek Main Architect Office – timely provision of main permissions for objects to be built.

Gosregister – delivery of corresponding inquiries and documents to novostroiki residents.
Areas of overlaps with other agencies:
• Both OGUKS and UKS carry out capital construction
• Both OGUKS and Department of Road Construction carry out road construction
• With the State Architectural & Construction Supervision Board in terms of the control function for the construction
• With the Education Department in terms of equipping newly built schools.\(^{16}\)

**State Architectural & Construction Supervision Board for Bishkek City (SACSB)**

The SACSB provides registration of objects, issues permissions for construction and organizes the work of the State Acceptance Committee. Registration of objects is provided based on the availability of legal documents for land plots, and design documentation agreed with Bishkek Main Architect Office.

According to staff schedule there are 12 employees working in two divisions who are responsible for controlling construction of individual houses.

**Social Protection Department (SPD)**

The main functions of the SPD are to provide address social aid to poor households in novostroiki who have permanent registration (propiska), as well as state allowances, privileges on payment of municipal services, gas and electricity supply, material aid, individual activities among poor population through creation of jaamats, mutual aid groups.

Structurally the Social Protection Department consists of City department and 4 rayon departments. All employees of the department (217 persons) are responsible for work in novostroiki since there is no differentiation among those permanently registered in novostroiki or in other parts of the city.

Areas of overlap with other agencies: SPD functions concerning listing low-income and citizens eligible for categorical privileges (l’gotniki) overlap with rayon administrations and TBLSGs.

**Population employment department**

The main functions are to implement of state employment policies and provide social support for the unemployed. These functions include:
• Analysis of demand and proposal for working labor;
• Preparation of proposals on formation of population employment programs in the area of their implementation;
• Registration and recording of unemployed citizens, rendering them assistance in work selection;
• Organization of professional training, retraining and improvement of qualification of unemployed;
• Organization and conducting public paid works;
• Accrual and payment of allowances on unemployment and scholarships;

\(^{16}\) OGUKS builds schools by turnkey structure by building furniture, tables, etc.
• Financial support to unemployed people who want to make business;
• Provide information to population on possibilities to work and get professional training.

Micro-credit agency

The micro-credit agency is a state institution that is intended to provide financial support and micro-loans to unemployed citizens for organization of private business.

Micro-credit agency provides loans to all unemployed citizens of Bishkek including novostroiki residents, however the numbers are very small. For example, in Ak-orgo – 15, Archa-Beshik – 8, Alatoo – 2, Kok-Jar – 21, Ak-Bosogo – 10, Kasym – 7, Kolmo – 13, Kelechek – 4, Bakay-ata – 5, Dordoy – 6, Uchkun – 1.

Rayon administrations and TBLSGs

The main functions in terms of work with novostroiki are to:
• Organize implementation of City Council, Mayor and Rayon Heads’ decisions;
• Participate in development of social and economic development programs for novostroiki, introduce adjustments to the programs and control their implementation;
• Organize residents and workers of service area for works on improvement and sanitary cleaning of novostroiki;
• Assist healthcare institutions in conducting preventive and educational actions among novostroiki residents;
• Assist educational institutions in conducting arrangements with children (register preschool kids, reveal children who don’t go to schools, addressing the problems of homeless children, etc.);
• Assist military commissioners in compiling lists of elected activists, persons subject to call-up and other residents of novostroiki;
• Form public brigades within novostroiki jointly with law enforcement;
• Conduct work on address social protection of poor population of novostroiki;
• Establish public formations of novostroiki by elections at the conferences;
• Compile functional duties of block committees’ chairpersons with further approval by head of rayon local self-government administration.
• Register citizens living in novostroiki areas;
• Compile lists of voters;
• Compile lists of poor citizens as well as those needing the land plot allotment;
• Allocate and fix the land plots for construction of individual housing;
• Decide social and everyday issues through department of social protection of population;
• Streamline installation of temporary trading objects;
• Certify private receipts.

The rayon administrations also should:
• Assist in issues on land use in their territories (social and cultural objects, enterprises, stores, restaurants and other consumer services, passenger transportation, etc.);
• Submit claims and requirements to residents of block, street, house violating public order, order of housing exploitation, sanitary norms and other rules and apply measures on
public influence by discussing them at joint meetings or meetings of block committees either send materials for consideration of courts of aksakals and to administrative commission under rayon administration or to law enforcement bodies.

- Render assistance to law enforcement bodies in terms of observance of passport regime by citizens as well as in protection of public order.
- Assist tax bodies in organization of timely payment of taxies, levies and collections by residents.
- Issue inquiries on place of residence, on family composition, availability of cattle, garden, indebtedness for municipal services, certify inquiries on registration (propiska), discharge and temporary residency, certify consent of neighbors to sell-purchase apartments and houses.
- Conduct constant accounting of poor families, war veterans, participants of Afghan war, events in Batken, Chernobyl Nuclear station for rendering material support.
- Render assistance to municipal services (Bishkek enterprise of heating networks, Bishkek enterprise of electricity networks, accomplishment plant of October rayon, gas department of Bishkekgas, “Bishkekvodokanal”, “Gorvodremkhoz”, other municipal services), veterinary and financial and tax services and other state organizations in collection of payments and taxes and in conducting preventative arrangements.

The main interactions are with:

- UKS
- OGUKS
- Healthcare department under Bishkek City Administration
- Agency on local self-government development
- Rayon departments on social protection of population
- ROVD (passport department, block inspectors), City militia divisions
- Rayon department of population employment
- Rayon educational centers
- NGO:
  - United supreme headquarters of developers
  - «Ashar»
  - Bishkek center of social initiatives

Areas of overlapping functions with other agencies:

- ROVD – registration of citizens;
- Military committee – registration of draftees;
- Educational center – registration of pre-school and school children;
- Bishkek Main Architect Office – determining infrastructure objects dislocations, management of land plots;
- Social protection – registration and compiling lists of poor.

**Department of Culture of the Bishkek City Administration**

The Department of Culture is a structural division of the of Bishkek city administration, supervising such areas as theaters, visual arts, cultural and leisure activities, library and museum
business, development of the educational system of culture and arts among wide strata of the population. However this activity is not institutionally supported in the novostroiki areas, and one of the problems of novostroiki development is to open cultural establishments, such as libraries, music schools, recreation centers.

The public utility company “BISHKEKTEPLOENERGO” (heating, energy)

The following are boiler houses located in novostroiki, which are operated by «BISHKEKTEPLOENERGO»:

- Residential district «Akorgo» - #77;
- Residential district «Kolmo» - #78;
- Residential district «Archa-Beshik» - #79;
- Residential district «Ak-Bosorgo» - #81;
- Residential district «Kasym» - #83.

Bishkek city telephone network (BCTN)

The BCTN provides telephone and internet services to legal entities and individuals. It cooperates with chairpersons of novostroiki TOSs and blocks’ committees.

The following technology has been established for telephone installation in new housing estates: The OJSC “Kyrgyztelecom”, using its own resources, constructs mainline networks and installs telephone stations. The distribution networks are constructed at the expense of the local budgets and residents of these housing estates.

Department of Education, Bishkek City Administration

The Education Department is responsible for administration, supervision and coordination of activities of educational institutions in the city of Bishkek, including those located in novostroiki. Teachers in novostroiki schools are paid a bonus of approximately 30%. The education department is also responsible for preschools.

Bishkek Territorial Department of the Mandatory Health Insurance Fund (BTD MHIF)

The major objectives of the BTD MHIF are the following:
- Protection of citizens’ rights in the area of health protection;
- Control over the quality of provision of primary health care;
- Control over the activities of health institutions (compliance with statutory and legal acts on protection of the population’s health, compliance with sanitary norms and rules in the areas of novostroiki and other parts of Bishkek);
- Control over purposeful and rational use of resources of mandatory health insurance, the quality of provided health services, preventive and pharmaceutical services;
• Conduct explanatory work among the population on the issue of health protection and mandatory health insurance, within its competence, protect the interests of insured citizens under implemented programs;
• Protect interests and rights of the population in the area of health protection;
• Consider addresses of citizens related to the competence of the BTD MHIF.

“Bishkekvodokanal” (“Bishkek Water Supply” enterprise)

Bishkekvodokanal is responsible for water supply and treatment of waste water throughout Bishkek, including in novostroiki. Brigades have been established in novostroiki to operate water pipelines and an emergency service has been established as well. About 40 people are employed for the novostroiki and they have the use of 5 vehicles.

Department of Interior of Bishkek city

The major functions are to ensure a stable public and political situation, ensure safety of citizens and protection of public order. The objectives of ensuring public order and safety of citizens, as well as crime fighting are implemented by the staff of the Doi of Bishkek city, of Leninskyi, Oktaybrskyi, Pervomaiskyi districts, as well as by 30 city militia units located in the territory of Bishkek city.

State Traffic Inspectorate of Bishkek city (STI)

The major objective of the State Traffic Inspectorate is to ensure uninterrupted, smooth traffic safety.

Department of Housing and Utilities and Fuel and Energy Complex of Bishkek city (HU & FEC Department)

The major activities of the Department include the development and implementation of the policy of the Bishkek city mayor’s office and the Bishkek city kenesh of deputies on development of housing and utilities and fuel and energy complex in interaction with all structural subdivisions of the Bishkek city mayor’s office and other concerned agencies. The Department does not carry out any functions in novostroiki areas.
<table>
<thead>
<tr>
<th>International good practice</th>
<th>Current situation in Kyrgyz Republic</th>
<th>Suggested areas for further work</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Demonstrate political will.</strong> Both national and local governments must provide the vision, commitment, and leadership required to sustain nationwide upgrading.</td>
<td>Although different parts of the government have consistently worked to address the problem of novostroiki, there is no common vision, strategy or consensus regarding what should be done.</td>
<td>There is a need to create a vision and a consensus on how to solve novostroiki problems in a coordinated and phased (prioritized and sequenced) manner. Involvement of the national government is important as novostroiki are a problem found in other cities than Bishkek.</td>
</tr>
<tr>
<td><strong>2. Set national and city targets.</strong> Set clear targets and ensure public sector accountability by engaging stakeholders in planning and monitoring results.</td>
<td>The existing targets are sector by sector physical investment targets (e.g. km of pipes, roads, # of schools built). Stakeholder involvement in planning and monitoring is limited.</td>
<td>Develop a list of essential indicators and ensure they are collected. Indicators should allow monitoring not only of the current situation (i.e., population and inputs (i.e., schools built), but also outcome and impact (number of children attending neighborhood schools, teacher/student ratios, hours of supply of water, etc.), including by novostroika. Involve stakeholders in monitoring results.</td>
</tr>
<tr>
<td><strong>3. Put it in the budget.</strong> Support urban upgrading as part of core business, nationally and locally.</td>
<td>Funding is insufficient and existing funding could be more effectively leveraged. Donor involvement has been limited as has private sector involvement.</td>
<td>Work with donors, the private sector and communities to develop approaches that will enable pooling of resources in support of a common vision and strategy.</td>
</tr>
<tr>
<td><strong>4. Implement policy reforms.</strong> Ensure necessary reforms dealing with land, finance, and institutional frameworks.</td>
<td>Numerous agencies are involved in providing infrastructure, legalizing land and houses, providing residency permits, schools, health services and transport. Interventions are often uncoordinated and responsibilities often overlap.</td>
<td>Review all existing institutional arrangements and identify ways in which they could be simplified. Strengthen the capacity of OGUUKS to serve as the central coordinating agency/unit.</td>
</tr>
<tr>
<td><strong>5. Ensure open and transparent land markets.</strong> Reform closed and opaque land markets which encourage</td>
<td>Although a good national land registration system has been developed, land plots in novostroiki frequently are not registered.</td>
<td>Develop and support a comprehensive land registration program for novostroiki plots.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International good practice</td>
<td>Current situation in Kyrgyz Republic</td>
<td>Suggested areas for further work</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>corruption, patronage, and exploitation of the urban poor, as well as constrain capital markets.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6. Mobilize non-public sector resources.</strong> Engage the residents themselves, who have both the ability and the interest in promoting upgrading, and the private sector, which should be engaged as a risk-sharing partner rather than a mere contractor to the public sector.</td>
<td>Ashar, which is community led and implemented, is already used in various novostroiki, as well as elsewhere in the country.</td>
<td>Scale up community led urban infrastructure development, possibly by leveraging the efforts with matching grants.</td>
</tr>
<tr>
<td><strong>7. Prevent the growth of new slums.</strong> Facilitate access to land and services by planning realistically for future growth.</td>
<td>A number of factors including the Land Code’s guarantees of the right to a plot of land, Bishkek’s continued economic strength relative to the rest of the country, and the lack of other kinds of affordable housing all provide impetus for continued migration to the city and the city’s continued growth and expansion.</td>
<td>Build a consensus among the stakeholders as to how this future growth will be accommodated, including identifying future areas for growth and making sure future sub-divisions reserve land necessary for streets, schools and other essential services, as well as preserving existing drainage systems.</td>
</tr>
</tbody>
</table>
Bibliography


