



World Food  
Programme

vam

wfp food security analysis

Regional Bureau for the  
Middle East,  
Central Asia & Eastern Europe (OMC)

Prepared by  
Agnes Dhur  
November 2008

Rapid Food Security Assessment in  
the Periphery of  
Bishkek, Kyrgyzstan Republic



## **ACKNOWLEDGEMENTS**

The World Food Programme wishes to thank the staff of El Pikir company who conducted the household and Key Informant interviews and Focus Group discussions for this Rapid Food Security Assessment in the periphery of Bishkek, Kyrgyzstan Republic, and performed data entry and a good part of the data analysis. Training and household data analysis were provided by Tamara Nanishtavili, Food Security Analyst from WFP.

The assessment also benefited from the assistance of Andrea Cuzyova and Denis Kovalenko and inputs from Matthew Naumann of the United Nations Resident Coordination Unit in Bishkek. The UNDP Bureau for Crisis Prevention and Recovery is warmly thanked for its financial support to undertake this assessment.

Finally, the selected households and informants in the neighbourhoods of Bishkek are warmly thanked for their time and willingness to respond to the various queries of the survey teams.

The report was prepared by Agnès Dhur, Food Security Analysis Service, World Food Programme, Rome.



## Table of Contents

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>I – BACKGROUND</b>	<b>3</b>
<b>II – METHODOLOGY</b>	<b>3</b>
2.1 Sampling	3
2.2 Teams and training	5
2.3 Methodology for the food security analysis	5
2.4 Limitations	6
<b>III - LEVELS AND NATURE OF FOOD INSECURITY</b>	<b>6</b>
3.1 Food consumption and food security	6
3.2 Food consumption patterns and risks for nutrition and health	7
3.2.1 Characteristics of the diet	7
3.2.2 Number of daily meals of adults and children	8
<b>IV - LIVELIHOOD ASSETS AND CHARACTERISTICS OF THE FOOD INSECURE</b>	<b>8</b>
4.1 Human capital	8
4.1.1 Household size	8
4.1.2 Age of head of household	10
4.1.3 Gender of head of household	10
4.1.4 Marital status of the head of household	10
4.1.5 Education of the head of household	11
4.1.6 Health status and access to health services	11
4.2 Physical capital	12
4.2.1 Housing	12
4.2.2 Access to utilities	13
4.2.3 Roads and transportation	15
4.3 Financial capital	15
4.3.1 Income sources	15
4.3.2 Expenditures	19
4.3.3 Debts	23
4.3.4 Assets	23
4.3.5 Savings and access to a bank account	23
4.4 Social capital	24
4.4.1 Mutual support	24
4.4.2 Receipt of social benefits	24
4.4.3 Social infrastructures: schools, kindergartens, hospitals and polyclinics	25
4.4.4 Community mobilization	25



<b>V - LIVELIHOOD AND COPING STRATEGIES</b>	<b>26</b>
<b>5.1 Arrival and permanence in Bishkek periphery</b>	<b>26</b>
5.1.1 <i>Duration of stay in current location</i>	26
5.1.2 <i>Main reasons for coming to Bishkek periphery</i>	27
<b>5.2 Migration</b>	27
<b>5.3 Crop and animal productions</b>	27
5.3.1 <i>Cultivation</i>	27
5.3.2 <i>Animal raising</i>	28
<b>5.4 Sources and access to food</b>	29
5.4.1 <i>Sources of food and dependence on the market for food</i>	29
5.4.2 <i>Food availability on markets</i>	30
5.4.3 <i>Food prices on local markets</i>	31
5.4.4 <i>Household food stocks</i>	32
<b>5.5 Terms of trade</b>	33
5.5.1 <i>Animals</i>	33
5.5.2 <i>Wages</i>	33
<b>5.6 Exposure to shocks and vulnerability to high food and fuel prices</b>	33
5.6.1 <i>Main shocks</i>	33
5.6.2 <i>Groups vulnerable to high food and fuel prices</i>	34
<b>5.7 Coping strategies</b>	35
5.7.1 <i>Changes in income sources</i>	35
5.7.2 <i>Changes in patterns of expenditures</i>	35
5.7.3 <i>Changes in patterns of food consumption</i>	35
5.7.4 <i>Changes in patterns of migration</i>	36
<b>5.8 Receipt of assistance</b>	36
<b>VI - CONCLUSION ON THE FOOD SECURITY SITUATION AND PERSPECTIV</b>	<b>37</b>
<b>6.1 How many, who, where and why are households food insecure?</b>	<b>37</b>
6.1.1 <i>Number of food insecure</i>	37
6.1.2 <i>Who is the food insecure?</i>	37
6.1.3 <i>Why are they food insecure?</i>	38
<b>6.2 How severe is the food security situation in the periphery of Bishkek</b>	<b>38</b>
<b>6.3 How different is the situation in the periphery of Bishkek from other urban</b>	<b>39</b>
<b>6.4 What are the anticipated shocks and measures already taken?</b>	<b>40</b>
6.4.1 <i>Main anticipated shocks</i>	40
6.4.2 <i>Measures already taken</i>	41
<b>6.5 How the situation may evolve in the next 6-12 months?</b>	<b>42</b>
6.5.1 <i>Best case scenario</i>	42
6.5.2 <i>Most likely scenario</i>	42



<b>VII - RESPONSE OPTIONS AND RECOMMENDATIONS</b>	<b>43</b>
<b>7.1 Households' own priorities</b>	<b>43</b>
<b>7.2 Target beneficiaries and type of assistance for immediate interventions</b>	<b>44</b>
7.2.1 <i>Target beneficiaries</i>	44
7.2.2 <i>Type of assistance</i>	44
7.2.3 <i>Modalities of provision of the assistance</i>	45
<b>7.3 Livelihood support response options</b>	<b>45</b>
<b>7.4 Monitoring and further assessments</b>	<b>46</b>
7.4.1 <i>Monitoring of the food security situation in urban peripheries</i>	46
7.4.2 <i>Further assessments of the food security situation in urban peripheries</i>	46



## LIST OF TABLES

<b>Table 1:</b> Table 1: Indicators for novostroiki selection	4
<b>Table 2:</b> Selected novostroiki with ranking results	4
<b>Table 3:</b> Novostroiki by number of clusters and interviews held	5
<b>Table 4:</b> Bishkek periphery: food consumption – October 2008	7
<b>Table 5:</b> Bishkek town: food consumption and access - 1st quarter of 2008	7
<b>Table 6:</b> Food expenditures per capita	20
<b>Table 7:</b> Anticipated shocks and impacts on the food insecure in the next 6-12 months	41
<b>Table 8:</b> Food security monitoring system for the periphery areas of towns	46



## LIST OF FIGURES

<b>Figure 1:</b> Profile of food consumption groups; Bishkek, November 2008	7
<b>Figure 2:</b> Levels of food consumption and number of daily meals of adults and < 5 children	8
<b>Figure 3:</b> Levels of food consumption and household size	9
<b>Figure 4:</b> Levels of food consumption and marital status of the household	10
<b>Figure 5:</b> Levels of food consumption and education of head of household	11
<b>Figure 6:</b> Key informants' report on main constraints to receive health treatment	12
<b>Figure 7:</b> Levels of food consumption and walking time to nearest public transportation system	15
<b>Figure 8:</b> Levels of food consumption and stability of income	16
<b>Figure 9:</b> Levels of food consumption and stability of 2 <sup>nd</sup> source of income	17
<b>Figure 10:</b> Levels of food consumption and change in amount of income 07-2008	18
<b>Figure 11:</b> Levels of food consumption and active search for work	18
<b>Figure 12:</b> Share of food expenditures in households with poor food consumption	21
<b>Figure 13:</b> Share of food expenditures in households with borderline food consumption	21
<b>Figure 14:</b> Share of food expenditures in households with acceptable food consumption	21
<b>Figure 15:</b> Levels of food consumption and share of non-food expenditures	22
<b>Figure 16:</b> Levels of food consumption and increase of expenditures 2007-2008	23
<b>Figure 17:</b> Levels of food consumption and assistance given to relatives with food or cash	24
<b>Figure 18:</b> Key informants' report on main constraints to attend primary school	25
<b>Figure 19:</b> Levels of food consumption and duration of stay in the periphery of Bishkek	27
<b>Figure 20:</b> Levels of food consumption and main constraints for cultivation	28
<b>Figure 21:</b> Key informants' report on main constraints to cultivation	28
<b>Figure 22:</b> Levels of food consumption and main constraints for animal raising	29
<b>Figure 23:</b> Key informants' report on main constraints for animal raising	29
<b>Figure 24:</b> Key informants' report on potato availability on local markets	30
<b>Figure 25:</b> Key informants' report on wheat flour/grain availability on local markets	31
<b>Figure 26:</b> Key informants' report on changes in market prices compared to one year ago	31
<b>Figure 27:</b> Levels of food consumption and duration of wheat stocks for consumption	32
<b>Figure 28:</b> Levels of food consumption and duration of potato stocks for consumption	32
<b>Figure 29:</b> Levels of food consumption and exposure to shocks	33
<b>Figure 30:</b> Key informants' report on most vulnerable households	34
<b>Figure 31:</b> Levels of food consumption and 1 <sup>st</sup> priorities	43
<b>Figure 26:</b> Key informants' report on 1 <sup>st</sup> priorities for household	44



## **EXECUTIVE SUMMARY**

### **1 – Methodology of the assessment**

The Rapid Food Security Assessment in the periphery of Bishkek, capital city of the Kyrgyz Republic, combined interviews with 105 households randomly selected in 8 of the most deprived neighbourhoods of the periphery, 15 Key Informants and 10 Focus Group discussions. Data were collected on household size, characteristics of the head of household, housing and access to utilities, main income and food sources, expenditures, debts and assets, migration, coping strategies and assistance received.

Contrarily to the food security analysis conducted in October/November using nation-wide data collected through the Kyrgyz Integrated Household Survey (KIHS), it was not possible to use a reliable food access indicator due to the limited data collected and sample size. As the KIHS re-analysis showed a close association between food consumption and food access in urban areas, household food security in the periphery of Bishkek was approximated by food consumption. Three food consumption groups were created as a proxy to food security, using a score of the frequency and diversity of food consumed in the 7 days prior to the survey. The groups were “profiled” against a series of characteristics to determine factors associated with food consumption/food insecurity and levels of risk to lives and livelihoods.

### **2 – How many are food insecure in the periphery of Bishkek?**

Based on food consumption patterns, at the end of October 2008, 9% of the households were severely food insecure, 20% moderately food insecure and 71% food secure. These figures represent an estimated 11,250 severely food insecure people (2,620 households) and 25,000 moderately food insecure people (5,830 households). These proportions are lower than the estimates obtained through the re-analysis of the KIHS but the different indicators used do not authorize a direct comparison. Results do indicate, however, that the food security situation in the periphery of Bishkek does not seem significantly worse than in other areas of the country.

### **3 – Who are the food insecure in the periphery of Bishkek?**

Food insecure households in the periphery of Bishkek, as other food insecure elsewhere in the country, live in poor dwellings with no access to in-house running water, adequate toilet facilities and connection to central sewage systems, and possess few assets. They do not cultivate or own animals.

The food insecure eat a diet lacking animal (meat, dairy) and fresh food (fruits, vegetables) rich in good quality protein, minerals and vitamins and often consume less than 3 meals a day. Children in some food insecure households also consume less than 3 meals a day.

Households depending on irregular and low-paid occupations and those receiving a fixed and low source of income such as pensions or civil servant salary are more likely to have a poor or borderline. Contrarily to other areas of the country, small households and women-headed households are also more likely to have a poor or borderline diet. Households hosting vulnerable members such as disabled persons or orphans are also in that situation, as well as those recently arrived in the neighbourhoods.

### **4 – Why are they food insecure?**

The lack of income prevents food insecure households in the periphery of Bishkek to purchase sufficient, good quality food to ensure proper diet for all members and to improve their living conditions. As they have no crop and animal productions, they fully depend on the market for their food and are thus highly vulnerable to increase of food prices. Households with poor food consumption dedicate up to 60% of their total expenditures for food, leaving a very small margin of maneuver in case of further price increases and for non-food expenditures. On the supply side, traders seem to have decreased the supplies of some commodities in local neighbourhood markets in response to lower household effective demand, thus limiting the availability and possibly putting further upward pressure on the prices of some food items including nutritious food such as meat and dairy products.





Location at a long distance from public transportation systems, insufficient or inadequate education compared to skills demanded on the labour market, poor social network connections (also linked to recent arrival), and increased competition for jobs in the context of higher cost of living due to food and fuel price rise, contribute to unemployment and low paid occupations. Although out-migration increased in response to worsening economic conditions, few households seem to benefit from remittances. Food insecure households have no savings or very small amounts and few valuable domestic assets that could help them to cushion economic shocks.

Economic constraints also limit access of food insecure households to health insurance and services. Low access to running water and difficulties to meet heating and cooking fuel costs do not facilitate adequate hygiene practices, further compounding their risks of disease and malnutrition. Support from relatives or friends is accessible to some households but not many of the food insecure.

A number of food insecure households also do not obtain the necessary official documents (registration) and most do not get access to government social benefits because they arrived rather recently, or because they settled on illegal land, or because they lacked education and information on administrative procedures.

### **5 – What assistance is required?**

The most likely scenario for the next 6-12 months includes frequent power shortages resulting in electricity cuts affecting household, health services and schools' water supply and heating. A further increase of food prices may not take place but prices will remain higher than usual, thus continuing to put a strain on households' purchasing power. The government has already taken some measures to increase the levels of pensions, benefits and civil servant salaries, but the coverage in Bishkek periphery is limited by the absence of official documentation of households as well as widespread unemployment. The same limitation will apply to the support provided by the World Bank and the European Commission. Social unrest cannot be excluded if the living and economic conditions of the population in the periphery areas seriously deteriorate during the winter.

While the main causes of food insecurity are structural and chronic, higher food and fuel costs have worsened the already existing economic difficulties of households. Most have activated 'positive' coping strategies in response to their increased difficulties, such as augmenting the number and intensity of income-earning activities, but also 'negative' ones such as decreasing health and education expenditures.

The livelihood risks and poor prospects call for a combination of short-term food-based assistance and longer-term livelihood support interventions. In the immediate, a rapid nutritional survey should be conducted in the periphery areas of Bishkek and Osh (2nd main town) to ascertain the levels of acute malnutrition among children under-5. On that basis, a supplementary feeding programme associated with a household food ration or voucher, could be launched to restore food consumption and prevent further deterioration of the nutritional situation.

A feasibility and design study should be conducted to implement cash or voucher interventions delivering either nutritious food (e.g. animal and fresh products) with the aim to improve food consumption, or staples (e.g. cereals or bread and oil) with the aim to provide an economic transfer to the households. An allowance for essential non-food needs should also be included. Cash-/voucher-for-work and cash/voucher-for-training, school feeding and outreach efforts to increase enrolment into government social assistance programmes are other interventions that would likely benefit households in the periphery areas of Bishkek and possibly other towns.



## **I - BACKGROUND**

The National Statistics Committee of the Kyrgyz Republic conducts a nation-wide household survey on a quarterly basis (Kyrgyz Integrated Household Survey – KIHS), including the collection of a wealth of information on household demographics, income, expenditures, crops, livestock, assets, food consumption and child anthropometry. An in-depth food security analysis was conducted in October/November 2008 using the KIHS data collected in 2006, 2007 and 1<sup>st</sup> quarter of 2008. Results<sup>1</sup> showed a high proportion of food insecurity in both rural and urban areas of the country: respectively 24% and 14% severely food insecure and 13% and 15% moderately food insecure. The UN Resident Coordination Office, in consultation with OCHA, other UN and non-UN agencies and donors activated a Food Security Group and plans were made to adjust, expand or launch relief interventions between December 2008 and April 2009. A series of livelihood support interventions was also identified for the medium and longer term.

However, an important limitation of the KIHS is that, due to the absence of a sampling frame for the periphery of urban centres, households living in these areas (*novostroiki*) are not included<sup>2</sup>. Their exclusion is problematic as these areas comprise mostly migrants from rural areas and smaller cities people are generally believed to be amongst the poorest. They are not officially registered and thus do not benefit from Government assistance programmes. They also tend to originate from already poor households and face difficulties to secure a job and income in the city.

It is thus possible that the average results for the capital city under-estimate the prevalence of food insecurity there. The factors found “better” in urban areas or in Bishkek than in rural areas, may in fact be worse for the group of the population living in the periphery of the cities. It was therefore decided to complement the re-analysis of the 2006, 2007 and early 2008 KIHS with primary data collection in the periphery of Bishkek, where most of the migrants concentrate. The results of a recent study<sup>3</sup> carried out by the World Bank for the design of an infrastructure project in Bishkek and Osh were also taken into account (only results regarding Bishkek periphery are mentioned in the present report).

## **II - METHODOLOGY**

### **2.1 Sampling**

Due to time constraints (results of the assessment needed to be ready by end November to enable winter contingency planning), a purposive sampling approach was applied in the periphery of Bishkek. The limitations for the representativity of the sample were addressed by multiplying the information sources: individual interview with households, interviews with Key Informants in neighbourhoods and community-based organizations, and Focus Group discussions. The various data collection tools aimed at complementing each other and at triangulation (cross-checks) in order to control as much as possible potential bias.

The periphery area of Bishkek (sample frame) comprises about 50 ‘*novostroiki*’ which are semi-informal settlements in the suburbs of Bishkek populated by migrants from various parts of the country. The assessment areas were selected purposively based on a World Bank study carried out in the periphery of Bishkek in 2007 for the design of an infrastructure project<sup>4</sup>. Three factors were considered for selecting *novostroiki*: poor infrastructure, vulnerability/poverty, high population density. The indicators used for delineating *novostroiki* with poor infrastructure and high vulnerability are summarized in the table below.

---

<sup>1</sup> Food Security Assessment in the Kyrgyz Republic. A food security analysis of the Kyrgyz Integrated Household Survey 2006, 2007 and 1<sup>st</sup> quarter of 2008 – World Food Programme, November 2008

<sup>2</sup> The Government is preparing a census to be launched in 2009. The peripheries of Bishkek and other towns will be included and should enable to update the sampling frame of the KIHS from 2010 onwards.

<sup>3</sup> Social Assessment prepared for the Bishkek and Osh Urban Infrastructure Project – World Bank, 2007

<sup>4</sup> Social Assessment prepared for the Bishkek and Osh Urban Infrastructure Project – World Bank, 2007



**Table 1: Indicators for *novostroiki* selection**

Infrastructure	Vulnerability
1. No access to drinking water - % of respondents	1. <i>Novostroiki</i> considered to be poor - % of respondents
2. Sewerage system is absent or non-operational - % of respondents	2. Lack of food and money: self-description of the household's financial status: <ul style="list-style-type: none"> <li>• difficult to provide the family with basic food;</li> <li>• manage to provide basic food but find it difficult to pay utilities and cloth - % of respondents</li> </ul>
3. No central gas - % of respondents	3. Share of pensioners >60 years of age and children < 17 years of age in the household.
4. No electricity - % of respondents	4. No central gas (% of respondents)
5. Bad roads	5. No electricity (% of respondents)
6. Poor dwelling (walls are made of tarpaulin , felt or clay) -% of respondents	6. One of 3 main sources of income are as follows: <ul style="list-style-type: none"> <li>• farm;</li> <li>• money or in-kind contributions from relatives in Kyrgyzstan;</li> <li>• money or in-kind contributions from relatives outside of Kyrgyzstan;</li> <li>• pensions (age, disability, survivor's benefit, other pension);</li> <li>• social assistance (related to poverty, disability, etc.);</li> <li>• unemployment benefit</li> </ul>
7. Small living space: square meters by household size	

A composite index of the three factors (infrastructure, vulnerability, population density) was created to rank *novostroiki* from worst (rank 4) to best (rank 1). The overall rank score was calculated as an average of the ranks for the three indicators. Eight *novostroiki* with an overall rank score of '3' and above were selected (see table below).

**Table 2: Selected *novostroiki* with ranking results**

<i>Novostroika</i>	ranking by infrastructure	ranking by vulnerability/ poverty	ranking by total population	overall rank (infr+pov+pop)
Dordoi	2	3	4	3.2
Kelechek	3	3	4	3.2
Ak-Bosogo	3	3	4	3.2
Kalys-Ordo	3	3	4	3.1
Archa-Beshik	3	3	4	3.0
Kara-GHygach	3	2	4	3.0
Ak-Bata	3	3	3	3.0
Ak-Tilek	3	3	3	3.0

Rank 4 = worst; rank 1 = best.

The selected *novostroiki* were located in four different regions of the city of Bishkek and encompassed a population of 51,502 households, representing 41% of the total residents of Bishkek periphery.

A total of 15 clusters were selected randomly from the 8 *novostroiki*. In each cluster, 7 households were chosen using systematic sampling. Additionally, one Key Informant interview was held per cluster. In the largest 10 clusters, discussions with Focus Groups consisting of 8 participants were also conducted. The interviews with households and Key Informants were conducted using structured questionnaires and a topic guide was used to carry out the Focus Group discussions.



**Table 3: Novostroiki by number of clusters and interviews held**

<b>Novostroika</b>	<b>Number clusters</b>	<b>Number households interviews</b>	<b>Number key Informants interviews</b>	<b>Number Focus Group Discussions</b>
Ak-Bata	2	14	2	1
Ak-Bosogo	1	7	2	1
Ak-Tilek	1	7	2	1
Archa-Beshik	2	14	2	2
Dordoi	3	21	1	1
Kalys-Ordo	1	7	2	1
Kara-GHygach	3	21	2	1
Kelechek	2	14	2	2
<b>TOTAL</b>	<b>15</b>	<b>105</b>	<b>15</b>	<b>10</b>

## **2.2 Teams and training**

A research and consulting company<sup>5</sup> specialized in social and political studies in several Central Asian countries was selected to carry out the food security assessment in the periphery of Bishkek. The company lead manager was trained (in English and Russian) by an international WFP staff on the various data collection tools (household and Key Informant questionnaires, Focus Group guide). In turn, the Manager ensured the training to the company's staff in Kyrgyz and Russian. A field pilot was conducted to finalize the tools and clarify uncertainties.

The field work was conducted by a total of 11 enumerators. The interviewers were entirely female as the households tend to open-up their doors and give consent on the interview to females. No refusals in the interviews/discussions were reported.

## **2.3 Methodology for the food security analysis**

Because of the limited time available to collect data in the periphery of Bishkek, it was not possible to collect the exact same data that were collected in the nation-wide quarterly KIHS that would have enabled to create food security groups using the same indicators. In particular, it was not feasible to collect as extensive information on expenditures, and to ask households to fill in a food diary for 2 weeks. Instead, food consumption was assessed using a proxy of kilocalorie intake and diet quality using the Food Consumption Score (FCS) as an indicator. The FCS combines the frequency of consumption of given food items during the 7 days preceding the survey, with the number of different food groups consumed. A weight is given to the food groups on the basis of their nutritional value (e.g. higher weight to animal food bringing good quality protein, minerals and vitamins).

For the food access indicator, the intention was to estimate the amount of total expenditures through the limited data collected on expenditures and use the same poverty and extreme poverty lines as the ones employed for the re-analysis of the KIHS. However, expenditures data were considered not sufficiently reliable in the rapid survey due to the fact that, when compared to the KIHS: (i) a much more limited number of expenditures were recorded, and (ii) expenditures referred only to the month prior to the assessment and not to the average for the year.

Compared to the results obtained in the 2007 WB study and the re-analysis of the KIHS in Bishkek city, the amount food expenditures estimated in the rapid food security assessment may be slightly overestimated for households with poor or borderline food consumption, and underestimated for households with acceptable food consumption. The share of food expenditures may also be underestimated due to an overestimation of the amount of non-food expenditures in all groups (see Section 4.3.3 of the report). Given the small number of households interviewed (105) in the rapid assessment compared to the robust random sampling on large numbers of households in the KIHS and in the 2007 WB surveys, it was considered preferable not to use the collected data on expenditures to create food access groups as was done for the re-analysis of the KIHS survey.

<sup>5</sup> El Pikir Centre for Public Opinion sent documentation and examples of assessment reports to corroborate its application. The company has an head office in Bishkek and experienced staff posted in the various oblasts.



This change of method was not judged problematic because of the similarities between food consumption groups and food security groups noted in the re-analysis of the KIHS. Similarities included the proportions, geographical distributions and characteristics of households. In sum, household food security in the periphery of Bishkek was determined by food consumption patterns only (using the FCS as an indicator) without combining them with a food access indicator.

#### **2.4 Limitations**

The purposive sampling approach adopted for the periphery of Bishkek does not enable statistical representativity, therefore generalization of the results to non-sampled neighbourhoods of the periphery of Bishkek must be done with caution.

Also, the proportions of food insecure households estimated from the food security assessment are not strictly comparable with the results obtained from the food security analysis done using the KIHS data collected in Bishkek because:

- it was not possible to collect the same dietary intake and expenditures data as in the KIHS (which has a much longer time available for data collection and analysis);
- the unreliable expenditures data collected in the assessment did not enable to combine food consumption with food access for the analysis of household food security, contrarily to what was done in the re-analysis of the KIHS; and
- the KIHS sampling frame in Bishkek did not include the periphery.
- 
- The assessment results are also not strictly comparable with the poverty results of the World Bank study done in 2007 in the periphery of Bishkek because here again different indicators were used to measure poverty and random sampling was applied in the WB study while purposive sampling of the poorest areas was done in the present assessment.

Comparisons with the results of the Bishkek KIHS food security re-assessment as well as with the 2007 WB must thus be done with caution but are valuable because of the more robust samplings used in these other two surveys.

### **III - LEVELS AND NATURE OF FOOD INSECURITY**

#### **3.1 Food consumption and food security**

As explained in Section 2.3 above, the small household sample and possible unreliability of expenditures data made it necessary to use only patterns of food consumption as proxies for levels of food insecurity, without adjusting the results for food economic access. However, the similarity between food consumption groups and food security groups found in the re-analysis of the Kyrgyz Integrated Household Survey (KIHS) provides re-assurance that, in this context, food consumption is very closely associated with poverty and a very good proxy of food insecurity, especially in urban areas. This was less true in rural areas where some of the poor were able to protect their food consumption - and thus their food security - despite their poverty, owing to their access to self-produced crops and animal products.

The survey found that 9% of households in Bishkek periphery had poor food consumption, 20% borderline and 71% acceptable. These results are close to those found in the re-analysis of the KIHS in Bishkek town (excluding the periphery), where, in the 1st quarter of 2008, an estimated 16% households had poor food consumption, 16% borderline and 68% acceptable. As such, it seems that the food consumption of residents of the periphery of Bishkek was not worse than that of households in Bishkek town.



**Table 4: Bishkek periphery: food consumption – October 2008**

Food consumption groups			Total
Poor	Borderline	Acceptable	
9%	20%	71%	100%

**Table 5: Bishkek town: food consumption and access - 1<sup>st</sup> quarter of 2008**

Food access groups	Food consumption groups			Total
	Poor	Borderline	Acceptable	
Poor	3%	0%	0%	3%
Average	6%	5%	2%	13%
Good	8%	11%	66%	84%
<b>Total</b>	<b>16%</b>	<b>16%</b>	<b>68%</b>	<b>100%</b>

### 3.2 Food consumption patterns and risks for nutrition and health

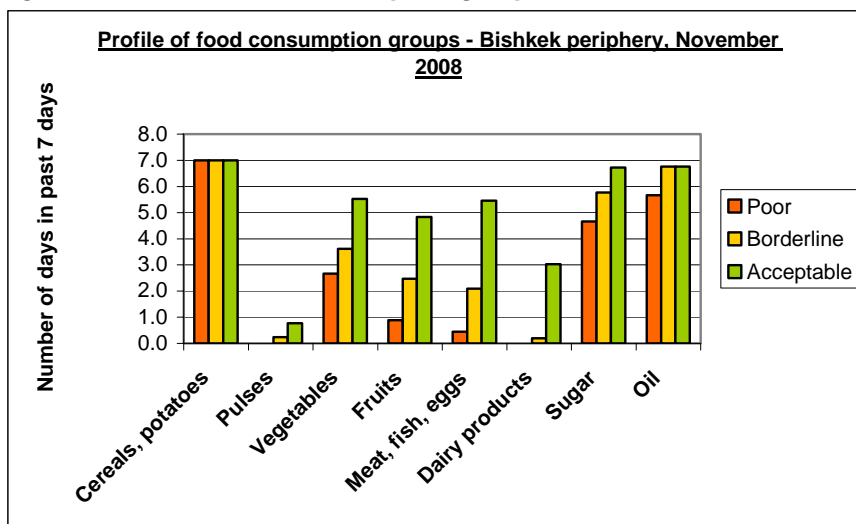
#### 3.2.1 Characteristics of the diet

Households with poor food consumption were essentially relying on calorie-dense food bringing few good quality proteins, minerals and vitamins, and thus likely to bring nutritional deficiencies on the short term, particularly for individuals with increased nutritional needs such as children, pregnant and lactating women, the chronically sick and the elderly. These households consumed on average cereals (bread, rice, pasta) and potatoes every day during the 7 days preceding the assessment, oil almost 6 days, sugar almost 5 days, vegetables less than 3 days, fruits and animal products less than 1 day.

Households with borderline food consumption had a slightly more frequent intake of oil (almost every day), sugar (almost 6 days), vegetables (almost 4 days) and fruits (almost 3 days), and meat products (about 2 days). Such a diet is richer in good quality proteins, minerals and vitamins, although still not optimal and expected to bring nutritional deficiencies on the medium term.

Households with acceptable food consumption were eating a varied diet with meat products, fruits and vegetables about 5 days and dairy products 3 days in addition to cereals, potatoes, vegetable oil and sugar every day.

**Figure 1: Profile of food consumption groups; Bishkek , November 2008**



The low consumption of meat and dairy products at the time of the assessment (end October) is also explained by the very limited availability of these items on local markets in the novostroiki (see Section 5.4.2), possibly due to lower offer by traders in a context of decreased households' effective demand (loss of purchasing power due to higher prices).



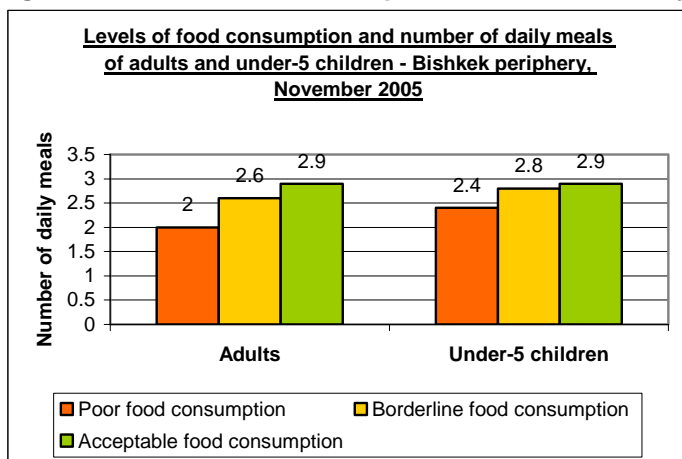
### 3.2.2 Number of daily meals of adults and children

Both adults and under-5 children in households with poor or borderline food consumption had consumed on average less than 3 meals during the day prior to the survey, and less than those in households with acceptable food consumption:

- among the 9 households with poor food consumption, adults took only 1 meal in 4 of them and 2 meals in one of them; children received only 1 meal in 2 households and 2 meals in 1 household.
- among the 21 households with borderline food consumption, adults took less than 3 meals in 7 of them; children received less than 3 meals in 4 households;
- none of the adults or under-5 children in households with acceptable food consumption ate only 1 meal and more than 90% ate 3 meals.

Given the already poor nutritional value of poor and borderline diets, consumption of less than 3 daily meals, especially for young children, is inappropriate and likely to aggravate the onset and development of nutritional deficiencies.

**Figure 2: Levels of food consumption and number of daily meals of adults and under 5 children**



Most of the households did not report changes in the number of daily meals of adults and children compared to “usual”. This finding may indicate that some adaptation of households in a context of increasing food and fuel prices already took place during the past 12-18 months.

## IV - LIVELIHOOD ASSETS AND CHARACTERISTICS OF THE FOOD INSECURE

### 4.1 Human capital

#### 4.1.1 Household size

According to the Key Informants interviewed, the average population living in the 8 *novostroiki* sampled was 15,890 persons (2,400 households), ranging from 3,400 in Ak-Bata to 35,250 in Kara-Jigac. The wide variation in the size of the *novostroiki* and uncertainties about the population estimates make it difficult to estimate the total population living in Bishkek periphery.

The 2007 World Bank study in Bishkek periphery estimated that about 29,150 households lived in the 50 *novostroiki* and with an average household size of 4.3 members (78% had 4 members), **the total** population was estimated as at least 125,000 people<sup>6</sup>. In comparison, Bishkek town population was estimated at about 798,000 inhabitants in 2005.

Most of the *novostroiki* inhabitants were Kyrgyz (98%), as in the WB study. The 105 households interviewed also indicated that Kyrgyz was the main language spoken at home.

<sup>6</sup> The World Bank study indicated that effective population size may in fact exceed this estimate as most households (93%) have temporarily residing relatives, friends and tenants. On average, 36% households reported did not have such hosts. About 22% consisted of 2 or more cohabiting families.



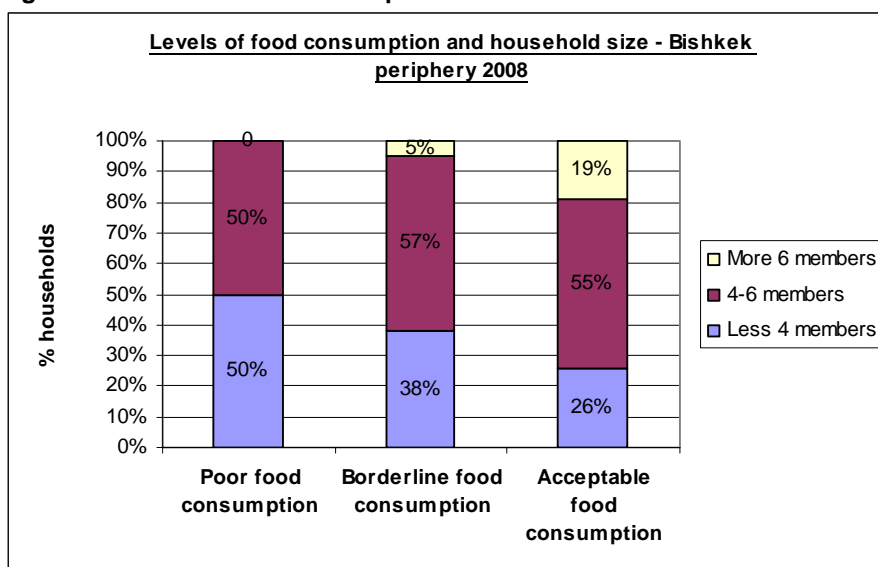
The rapid food security assessment found that households comprised on average 5 members. This is slightly higher than the size estimated by the WB study in 2007 and much higher than the average for Bishkek city as a whole (KIHS). The difference with the WB study may be explained by the inclusion of hosts or relatives who may not be permanent household members<sup>7</sup>, while the difference with the Bishkek KIHS may be due to the fact that the KIHS sample did not cover the periphery.

The sample comprised 30% of households with less than 4 members, 55% with 4-6 members, and 15% with more than 6 members. Overall, about 11% of households included primary school-aged children and 12% secondary school-aged children. There were slightly less primary school-aged children in households with poor food consumption (6%) and slightly more secondary school-aged children in households with poor or borderline food consumption (16-20% versus 9% in households with acceptable consumption). The results are consistent with the WB study which found a majority of households with at least 2 children<sup>8</sup> and more than half of households (56%) with school-age children.

Some 10% of the 105 households also included a pregnant woman and 21% a lactating woman. About 10% of households hosted at least one chronically sick member (4% one and 6% two members). Even though the sample size was small and these statistics must thus be taken with caution, these results point out to a significant proportion of households hosting vulnerable members.

In contrast with the 2008 KIHS results in Bishkek, households with poor or borderline consumption (i.e. likely to be severely or moderately food insecure) were smaller than households with acceptable food consumption (i.e. likely to be food secure): respectively 5, 4 and 3 members. Related to this, the dependency ratio<sup>9</sup> was lower among households with poor food consumption than in the other households (0.6 versus 0.9-1.0). In other words, 1 member aged 16-63 years in a severely food insecure household supported less than 1 member aged less than 16 or more than 63 years.

**Figure 3: Levels of food consumption and household's size**



In Bishkek as a whole, the increased food insecurity among larger households was interpreted as reflecting the insufficient cash and food resources mobilized by these households compared to the needs to be covered for their many members. The situation of households living in the periphery of the city may differ because larger households may be more able to multiply their income and livelihood sources than smaller households.

<sup>7</sup> The WB study found that 17% of households had more than 5 core members, including 7% with more than 7 members.

<sup>8</sup> The share of children under-5 was particularly high in Kara Zhigach (64%), Prigorodnoye (60%), Ozernoye (55%), Ak Ordo and Ak Bata (53% each).

<sup>9</sup> The dependency ration was calculated as the ratio of members below 16 years or above 63 years to members between 16 and 63 years.





#### 4.1.2 Age of head of household

Heads of households in the food security assessment were 39 years of age on average. This is similar to the 2007 WB study (41 years of age), into which an average head of household in Bishkek periphery was described as being “a male 38-45 years of age, married, employed, with some level of higher or professional education, earning a salary but also potentially having an overtime job”. The WB study found that 20% of the households were headed by a pensioner.

Female heads of households with poor food consumption tended to be younger than female heads of other households (39 versus 47 years), but no such relationship was found for male heads of households. The small number of sampled households calls for caution before generalizing these findings.

#### 4.1.3 Gender of head of household

The food security assessment indicated that 20% of Bishkek periphery households were women-headed. A similar proportion was found in the 2007 WB study. This proportion of female-headed household is much lower than the one found in the KIHS in Bishkek town excluding the periphery (48%).

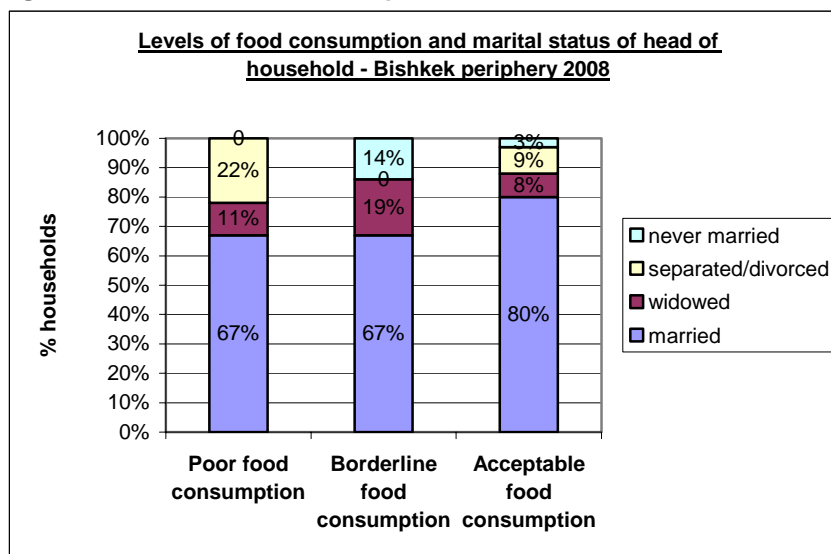
The proportion of women-headed households was larger among households with poor or borderline food consumption, than households with acceptable food consumption (more than 30% female-headed versus 16%). The WB study also found that female-headed households depended more upon help from relatives in the city than men-headed households. They were more likely to report difficulties with meeting basic food and clothes needs compared to average. This result differs from the situation in Bishkek town as a whole, where no relationship between the gender of the head of household and food security was found (re-analysis of the KIHS data).

The WB study also indicated that male heads of households were more likely to be employed and have a salaried job than female heads. Only half of women-headed households were married and a significant proportion were widows (17%) or divorced (13%).

#### 4.1.4 Marital status of the head of household

More than 3/4<sup>th</sup> of the heads of households were married, 10% widowed, 9% divorced or separated, and 5% never married. Widowed or divorced or separated heads of households were more likely to have a poor or borderline food consumption, than married heads of households.

Figure 4: Levels of food consumption and marital status of the household



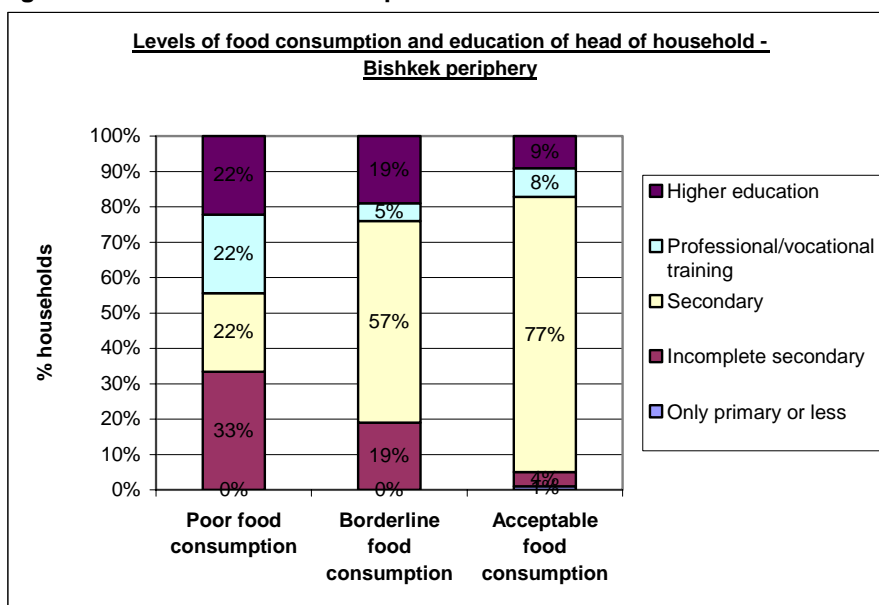


#### 4.1.5 Education of the head of household

More than 2/3<sup>rd</sup> of the 105 heads of households had secondary education, 10% had incomplete secondary, 9% professional/vocational training and only 12% higher education. These results differ from the 2007 WB study and the re-analysis of the KIHS in Bishkek town which both found a lower proportion of heads of households with secondary education (less than 30%) but a much higher proportion with higher education (around 40%). The reasons for these differences are not clear but may be linked to the fact that the food security assessment focused on the poorest neighbourhoods of the periphery.

Households with poor or borderline food consumption were more likely to have incomplete secondary or professional/vocational training than other households, but surprisingly they were also more likely to have higher education. However, the small numbers of households in the food insecure categories call for caution before generalising these results.

Figure 5: Levels of food consumption and education of head of household



The low number of households with primary or secondary school-age children does not enable to derive reliable statistics. However, it can be noted that a number of children did not seem to attend primary school even in the groups of households with acceptable food consumption (8 households out of 27 concerned). Economic difficulties to pay for school were mentioned by 2 of these households.

The situation seemed better for secondary school-age children, as only 3 of the 52 households concerned reported that they were not attending regularly school. Two of the reasons mentioned were help with domestic chores and economic difficulties.

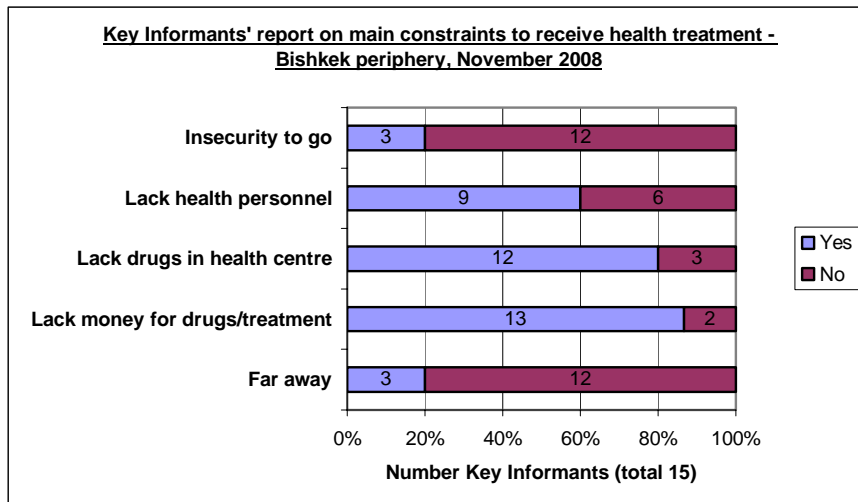
#### 4.1.6 Health status and access to health services

The majority of Key Informants indicated that households in the *novostroiki* were using a health centre within the neighbourhood to get treatment. There was no significant change compared to one year ago.

According to the Key Informants, households' economic difficulties, lack of medical supplies and lack of health personnel were the 3 main reasons for households to forego health treatment.



Figure 6: Key informants' report on main constraints to receive health treatment



Only about 10% of the 105 households interviewed in the periphery of Bishkek had a private health insurance. None of the 21 households with borderline food consumption had such an insurance and only 1 out of the 9 households with poor food consumption.

The 2007 World Bank study in Bishkek periphery reported that residents felt that it was much harder for them than for other city dwellers to get services at polyclinics and hospitals. Some cited the lack of any type of emergency medical help as many *novostroiki* were inaccessible for ambulances due to very poor road conditions.

Women with young children were frequently denied health care due to the absence of registration document (*propiska*). As people are assigned to clinics based on their place of residence, inability to officially confirm residence results in denial of service or facing higher service charge. Routine care is provided at discounted rates for registered residents, which was not yet the case for NS residents without *propiska*.

However, according to *novostroiki* residents, every second adult or his/her children got sick 'frequently and rarely' during the previous year. Wealthier families got ill more rarely than poor ones (respectively 53% and 42% 'never'). Flu was the main disease reported for both adults and children but 20% of the residents also reported infectious diseases due to the poor quality of drinking water.

## 4.2 Physical capital

### 4.2.1 Housing

More than half of the 105 households sampled lived in private houses made of mostly non-durable material (planks etc.) and 1/3rd in private houses made of better material. All the 9 households with poor food consumption, and most of those with borderline food consumption lived in houses made of poor material, compared to less than half of the households with acceptable food consumption. The proportion of households living in separate houses was much higher than in Bishkek town as a whole (27%).

Some 2/3rds of the 105 households sampled owned their dwelling (89% in the WB study). Ownership of the house was not clearly linked to the food consumption patterns.



The 2007 World Bank study indicated that most of the households constructed one-storey houses (78%) and very few resided in multi-storied apartment buildings (2-3%). Tenancy rate were low (11%). Less than 1/3<sup>rd</sup> of the houses (27%) were constructed of a good quality material (bricks). Walls were of concrete plates, slay etc. for 1/5<sup>th</sup> of the residents, while almost all roofs were of slate. Almost half of houses were self-made straw and clay bricks ('*saman*' bricks)<sup>10</sup>.

Most of the households interviewed in the 2007 WB study had land ownership documents (86%) and house ownership documents (75%). Poor households were less likely to have land and house documentation. Those with houses incompletely constructed (33%) could not obtain a full set of documents certifying property ownership.

Of the 35 households who did not own their dwelling, 26 had to pay a rent. The amount paid was 1,785 som/month on average. In the 2007 WB study, the 11% of households renting their dwelling paid about 1,000 som/month as rent, but 44% paid up to 3,700 som/month.

#### **4.2.2 Access to utilities**

##### Electricity

According to the 2007 World Bank study, electricity was available to 98% of the residents, irrespective of their wealth situation. However, only 74% had access during a full day in summer and 43% in winter. About 9% of the population had access to electricity less than 10 hours per day on average.

Electricity was more affordable for wealthier households, especially in the new *novostroiki*. A move from the poorest quintile to the wealthiest would result in a substantial increase of access to electricity by almost 10 hours per day. However, residing in newer *novostroiki* reduced access to electricity by almost 7 hours.

Non-payment rates were high among the *novostroiki* residents in general and the new areas in particular. Households with older and better educated heads were more likely to have better access to electricity.

##### Sanitation

The 2007 WB study found that half of *novostroiki* residents were very poorly covered by waste collection services. About 1/3<sup>rd</sup> did not benefit from communal waste collection service and only 10% mentioned the existence of special containers to collect waste. Poverty was not associated with a lower amount of waste removal. Monthly spending on waste collection tended to improve households' access to service. Large *novostroiki* with bigger populations experienced lower amounts of service, and newer *novostroiki* were significantly more neglected.

This situation differs markedly from the one in Bishkek town, where 85% of the inhabitants had access to the central sewage system.

Among the 105 households interviewed in the food security assessment, 84% used latrines and 11% used communal/public latrines. A similar proportion was noted in the WB study. The situation did not deteriorate compared to one year ago. Similarly to the WB findings, there was no clear association between food consumption levels and the type of toilet facilities used.

---

<sup>10</sup> The 2007 WB study found that in some areas clay houses predominated (e.g. in Kalys Ordo and Obezdanaya). In older *novostroikis* such as Enesai, Ak Ordo, Orok and Kok Zhar, more houses were built from traditional solid bricks, but the overall share at city level was small (27%). In general, *novostroikis* developed in later years tended to have houses built in clay and '*saman*' bricks rather than ordinary bricks. Almost everywhere, houses were covered by asbestos shingles.

In some *novostroikis*, 75% of the families live in half-constructed houses: Alamudunsky Village Council, an area along the Bishkek canal adjacent to Uchkun, western part of Ak Ordo etc. About 14% of *novostroiki* residents lived in temporary constructions while they continued to build their houses. This proportion was much higher in some of the newest *novostroiki*: Ozernoye 1 and 2 (95%), Ak Bata and Ak Tilek-2 (90%), Kalys Ordo and Obezdanaya (75%), Ak Ordo (72%), Altyn Ordo and Alamudun (60% each) and Prigorodnoye (50%).



## Water

Most of the 105 households interviewed had access to a safe source of water (piped, public tap, protected well) located at no more than 10 minutes walking distance on average. Only 2 households (one with poor food consumption and the other with borderline food consumption) used unsafe water sources. There were small changes compared to one year ago: 1 household with poor food consumption apparently lost its access to a safe source of water while 3 households with acceptable food consumption gained access to safe sources of water. Households with poor food consumption were more likely to be located far away from the source of water, than other households (4 out of the 9 households had to walk for more than 15 minutes).

The 2007 World Bank study in the periphery of Bishkek reported that about 64% of the households had 24-hour water access, but none in some neighbourhoods. Some 13% had water for less than 10 hours per day. Two thirds of households were connected to the central water supply system (cold water). However, due to frequent water cut-offs, 84% also used water storage tanks. Slightly more than half had indoor water supply. Only 2% had hot water from in-door taps. Most of the poor (88%) accessed drinking water from wells for common use but economic well-being was not related to better access to water. In fact, there were concentrations of wealthier households in the newer *novostroiki* which were lacking water services due to the mere absence of infrastructure. The task of storing water in tanks was ensured by heads of households (55%), spouses or children (36%). This was identified as another reason why children may miss classes at school. The poor were more likely to resort to water storage practice.

The WB study showed that water access was dependent upon availability of power: 1 hour/day increase in power availability was associated with 0.74 hour/day increase in water availability. The relationship was weaker for newer *novostroiki*, residents in these areas had on average 3 hours less water availability. Higher level of monthly expenses on water tended to improve service availability. Half of the households used private or public baths or showers, while the rest bathed in the yards, open ponds or at relatives' or friends' houses.

## Cooking and heating energy

About half of the households used electricity for cooking, 20% gas, 12% wood, 10% coal/charcoal and 6% animal dung/shrubs. Sources of energy for cooking did not change significantly compared to one year ago and there was no clear association with the levels of food consumption.

The main constraints of households with cooking fuel were cost (mentioned by half of the households) or irregular supply (almost 1/3rd of the households). Again, no significant changes were mentioned compared to last year, but this may in fact reflect an already difficult situation with regard to access to electricity and cost of energy supply which can hardly get worse.

For heating, 2/3rd of households used coal/charcoal, 21% electricity and 10% wood. Households with poor food consumption seemed to use more frequently electricity than coal/charcoal but the small number of households in that group calls for caution before generalizing this finding. Among households with borderline food consumption, a few seem to have switched from electricity to coal/charcoal compared to one year ago.

As for cooking, the main constraint with the source of energy for heating was cost (70% of households) or irregular supply (11% of households).

According to the 2007 World Bank study, only 5% of households in Bishkek periphery had gas connection and 1% central heating. Cooking was mainly done on coal-fired ovens or electric and gas stoves using replaceable gas cylinders. Heating used ovens and coal-fired heating tanks, small stoves and electric heaters.

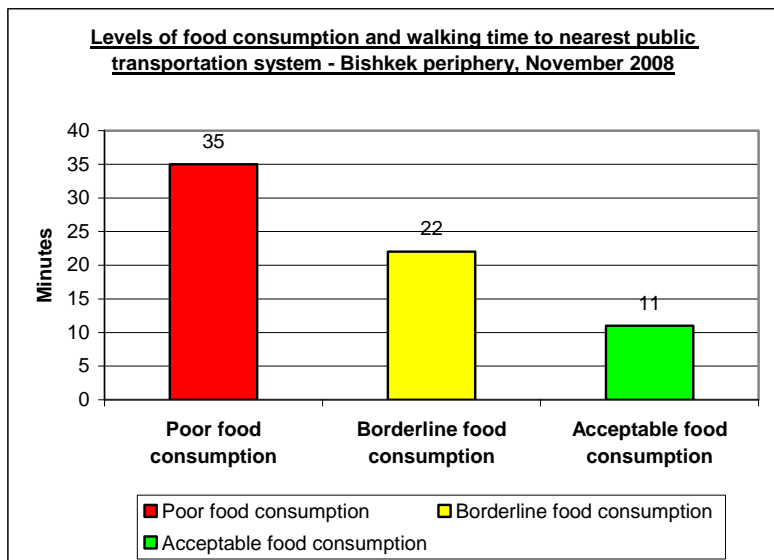
Access to public utilities varied depending on the location of the *novostroiki*. Those closer to the central systems had more chances to get connected to both hot water and central heating. Most people do not seem to pay for water, electricity, gas, or heating.



#### 4.2.3 Roads and transportation

On average households lived at 15 minutes walking distance from a public transportation system. Households with poor or borderline food consumption were more likely to live further away (35 and 22 minutes respectively). There was no significant change compared to one year ago. While 2/3rd of households with poor food consumption and half of households with borderline food consumption were located at 15-30 minutes walking distance, only 1/3<sup>rd</sup> of households with acceptable food consumption were at that distance.

Figure 7: Levels of food consumption and walking time to nearest public transportation system



The 2007 World Bank study confirmed that roads were bad and public transportation unreliable. Very poor internal roads conditions, especially during the rainy season, increased residents' spending on footwear and clothes, which are frequently quoted as a source of strain on family budgets. Residents of the most remote *novostroiki* in Bishkek had to walk long distances, sometimes 3-5 km twice a day, as part of their work commute. Private shuttle bus servicing *novostroiki* frequently refused to pick up school children from *novostroiki* because they were suspected to have no money to pay for a ride. On their side, bus and shuttle drivers emphasize poor road conditions, lack of street lights and generally poor public safety conditions as the major reasons preventing them to extend services to the most remote *novostroiki*.

More than half of the inhabitants spent 15-20 minutes to reach the nearest bus or fixed-run taxi stop and 26% more than 20 minutes. Time to reach the nearest school or shop was more than 1 hour for 43% and 33% of households respectively. The nearest hospital or polyclinic was at 30-60 minutes for 57% and 20% of households respectively.

#### 4.3 Financial capital

##### 4.3.1 Income sources

###### Number of income-earning members

On average between 1 and 2 members were earning an income in the households interviewed:

- of the 9 households with poor food consumption, 4 had one member earning an income, 4 had two members and 1 had three members earning an income;
- some 60% of households with borderline or acceptable food consumption had just 1 member earning an income.

There was a slight trend towards an increase in the number of income-earning member among households with poor food consumption compared to one year ago. Focus Group discussions confirmed that the increase of food and electricity costs led many residents to multiply the number of jobs, and thus increase their income, whenever possible.



### Type of sources of income

A large proportion of households depended on irregular daily labour or casual work as their main source of income. This indicates a high reliance on a rather unreliable and low income-earning activity, particularly - but not only- for those with poor food consumption. Self-employment and non-agricultural labour were the next two principal income sources most frequently mentioned by households.

More specifically:

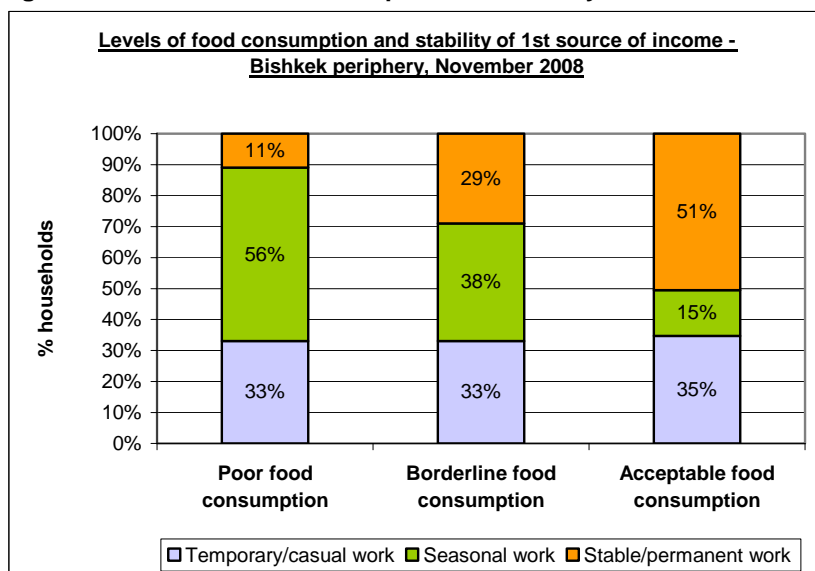
- the most important source of income of 4 of the 9 households with poor food consumption was irregular daily labour or casual work; 2 of the 9 households relied on non-agricultural work (construction, guard, etc.);
- among the 21 households with borderline food consumption, 1/3<sup>rd</sup> were self-employed (taxi driver, carpenter, electrician etc.), 3 relied on daily labour or casual work and 3 on non-agricultural work;
- more than 1/4<sup>th</sup> of households with acceptable food consumption depended on daily labour or casual work for their main source of income, 1/4<sup>th</sup> on non-agricultural work, 16% were government employees and 15% self-employed.

Many Key Informants (9 out of 15) mentioned petty trade as an important 1<sup>st</sup> source of income for households, although households themselves did not mention it that often. This may be because other income-earning activities undertaken by households are less visible than petty trade and thus underestimated by Key Informants.

The 1<sup>st</sup> source of income brought most of the income received by households. For those with two income sources, the 2<sup>nd</sup> most important source of income was petty trade, non-agricultural labour, irregular daily labour/casual work or government employment. Only households with acceptable food consumption mentioned apartment renting, pension, sale/barter of horticulture or fruit products, or remittances as a second source of income. Key Informants also referred to self-employment as 2<sup>nd</sup> source of income for households. Government employment and remittances were mentioned as 3<sup>rd</sup> sources of income for 6 out of the 15 Key Informants interviewed.

Less than half of the households had a regular first source of income; 1/3<sup>rd</sup> had temporary/casual income sources and almost 1/4<sup>th</sup> had seasonal works. Households with poor or borderline food consumption were less likely to have a stable 1st source of income than those with acceptable food consumption.

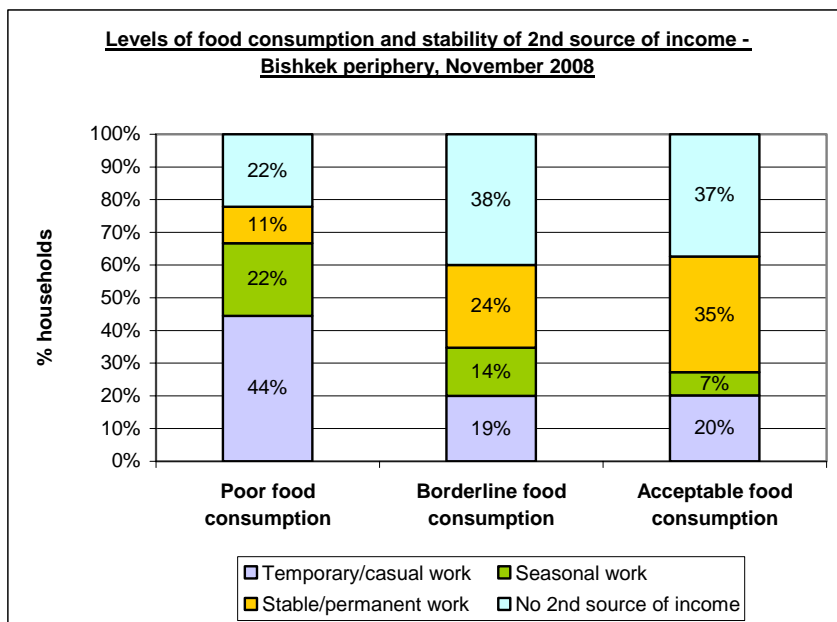
**Figure 8: Levels of food consumption and stability of income**



Similarly, few households had a stable 2<sup>nd</sup> source of income, especially those with poor or borderline food consumption.



Figure 9: Levels of food consumption and stability of 2<sup>nd</sup> source of income



The 2007 World Bank study indicated that salaries were the main source of income, followed by overtime or additional jobs. About 36% of heads of households were engaged in private entrepreneurship, 32% in civil service, 19% private company workers, 11% self-employed (private taxi service providers, seamstresses, construction workers, bee-keepers, farmers, welders, carpenters, cooks etc.) and 2% farmer. About 21% of the heads of household were retired persons. Most of the employed occupations were in low prestige, low paid jobs, due to the lack of qualifications and skills, as well as connections and money, to get better places.

The employment pattern of *novostroiki* residents depended on the number of years the person had lived in the place. People from older *novostroiki* had lived there for a long time and had practically become Bishkek residents with extensive connections in the city. By doing so, they also obtained new qualifications that are in high demand and increased their chances to get more prestigious, well-paid jobs.

In contrast, a higher proportion of residents in the new *novostroiki* had recently come from villages and other oblasts. Some of the *novostroiki* (e.g. Dordoi) have emerged around the markets which have become a major source of employment.

About 16% male- and 20% female-headed households relied on monetary and in-kind assistance from relatives in Kyrgyzstan.

#### Changes in levels of income compared to one year ago

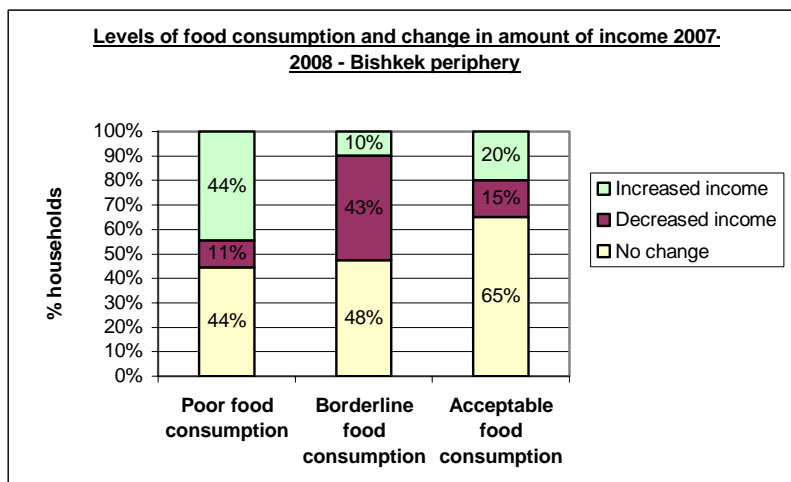
The level of income did not change compared to one year ago for some 60% of the households interviewed. An equal proportion of households, 20% each, reported either a decrease or an increase of their income. Among the 9 households with poor food consumption, 4 reported an increase of their income and only 1 indicated a decrease. However, an increase of income does not mean that these households were better off if the starting base was very low and if costs of living rose more than incomes. Rather, the income increase reflects their efforts to compensate for the higher costs of food and energy.

Households with borderline food consumption seemed to be more likely to report a decrease of their income compared to households with acceptable food consumption. However, the small number of households in the groups calls for caution before generalizing the results.





Figure 10: Levels of food consumption and change in amount of income 2007-2008



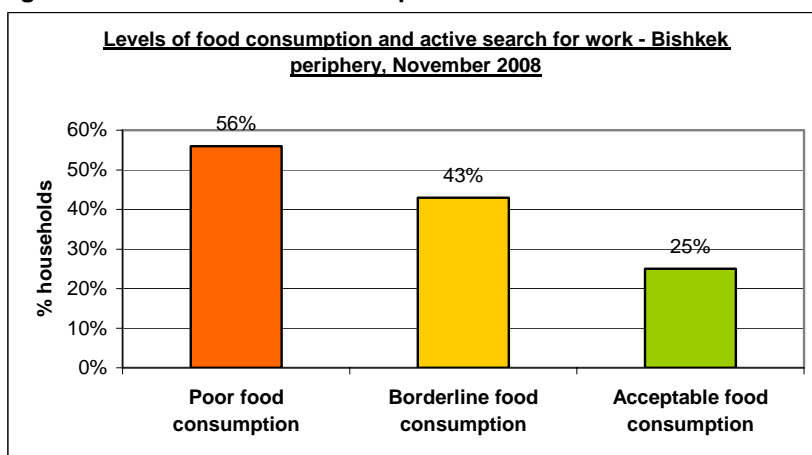
Almost all of the households who indicated a decrease - or an increase - of their income compared to last year estimated the loss – or the gain- at almost 30%.

While the absolute amount of income may not have changed for many households, their **purchasing** power has decreased as a result of the higher food, energy and transportation costs. Focus Group participants acknowledged some increase of salaries of civil servants and pensions, but insufficient to compensate for the higher prices.

#### Unemployment

Almost 1/3<sup>rd</sup> of the households interviewed indicated that some members were not working but were actively looking for work. The proportion was higher among households with poor or borderline food consumption, reflecting their greater struggle to increase their income.

Figure 11: Levels of food consumption and active search for work



Focus Group discussions confirmed that unemployment was frequent.

*'Young people spend time on the streets, without jobs. In order to find a decent paying job, one needs to beat down many doors and visit many companies and firms without any guarantee of finding a job'.*  
Focus Group discussion in Kara-Jygach

The 2007 World Bank study indicated that unemployment in Bishkek periphery was widespread (21-22% households affected), especially among those living in newly established *novostroi*ki. Unemployment rates were very high in Kalys Ordo and Obezdanaya (67%), Prigorodnoye (64%), V. Antonovskoye (63%), Ozernoye (55%), Ak Tilek and Alamudun Rayon (50%).

Unemployed heads of households constituted the majority of the vulnerable group. However, application for unemployment benefits was rarely done as it provided little benefits compared to the time and efforts



required for the process.

Some *novostroiki* residents mentioned employment barriers when employers learnt about their residence in *novostroiki*, due to fears that they would be late for work due to bad transportation for example. Some employers asked for residency registration ('propiska') before offering a job.

### Poverty

An in-depth poverty profiling of urban and rural households was conducted by the World Bank using 2005 KIHS data. The main results are summarized in the Box below.

#### **Box No1 - Main characteristics of poverty in urban areas**

- Since 2000, urban poverty has dropped more rapidly than rural poverty, with the exception of 2005 when economic growth turned negative. The higher sensitivity of urban poverty rates to growth points to the strong linkages between non-agricultural growth, employment opportunities, and urban poverty reduction. Furthermore, wages (for men and women) are always higher in urban areas, and the difference with rural areas is much more pronounced for the private sector.
- Compared to the urban non-poor, the urban poor have higher unemployment rates (18% vs. 10%) and lower employment rates (51% vs. 60%). The poor in Osh, the second largest city, are worst off of all: less than 40% of the extremely poor of working age are employed.
- Each urban poor working person has to support on average 3 other persons, compared to a non-poor employed person who has to support 2 other persons.
- An estimated 17% of all households in the bottom 40% income are relatively far from public transportation compared to 8% of non-poor households.

*Kyrgyz Republic Poverty Assessment. Volume I: Growth, Employment and Poverty – World Bank Report No.40864, September 2007*

With regards to the periphery of Bishkek more specifically, the World Bank study of 2007 estimated that about half of the *novostroiki* households (48%) were poor and 12% lived in extreme poverty based on subjective perceptions. Only 5% considered themselves rich. Some 42% said that they were able to cover their main subsistence needs such as major foodstuff purchases, clothing and utility bills, but they lacked money to purchase durable goods such as television, refrigerator etc. About 9% indicated that they did not have sufficient funds for food, while 21% experienced hardship with purchasing clothes and paying their utility bills. In that study, households with stable wage/salary and those possessing overtime/2<sup>nd</sup> jobs were less likely to mention difficulties with meeting basic food and clothes needs<sup>11</sup>.

### **4.3.2 Expenditures**

#### Food expenditures

The amount of monthly food expenditures was 5,535 som per household on average, corresponding to 1,320 som per capita. Monthly food expenditures per capita were lower among household with poor food consumption than other households (1,155 versus more than 1,300 som). Food expenditures among households with poor or borderline food consumption in Bishkek periphery were higher than food expenditures among severely or moderately food insecure households in Bishkek town. Part of the differences may be due to sampling and analysis differences (purposive versus random sample, and combination with poverty for the analysis in Bishkek town).

<sup>11</sup> The 2007 World Bank study identified the newest *novostroiki* in Bishkek (Kalys Ordo, Prigorodnoye, V-Antonovskoye, Ak Ordo and Ak Bata) as the most poverty-stricken, even though poverty was also high in some old *novostroiki* (Dostuk, some parts of Orok, Enesay).



**Table 6: Food expenditures per capita**

	Per capita food expenditures (som/month)						Total per capita consumption expenditures (som/month)		
	Bishkek periphery WFP 2008		Bishkek KIHS 1 <sup>st</sup> quarter 2008		Bishkek periphery World Bank 2007		Bishkek periphery	Bishkek KIHS 1 <sup>st</sup> quarter 2008	Bishkek periphery World Bank 2007
	Amount	% total exp.	Amount	% total exp.	Amount	% total exp.	Amount	Amount	Amount
Poor food consumption /severely food insecure	1,155	60%	784	69%	-	-	1,925	1,136	-
Borderline food consumption /moderately food insecure	1,355	51%	1,058	60%	-	-	2,657	1,763	-
Acceptable food consumption / food secure	1,326	56%	2,134	65%	-	-	2,368	3,283	-
<b>Total</b>	<b>1,317</b>	<b>56%</b>	<b>1,882</b>	<b>65%</b>	<b>~ 800</b>	<b>48%</b>	<b>2,352</b>	<b>2,895</b>	<b>6,590</b>

Food expenditures represented 60% of total expenditures in households with poor food consumption, 51% in households with borderline food consumption and 56% in households with acceptable food consumption. These proportions are lower than the one found for Bishkek town as a whole (65%) but higher than those estimated in the WB study (48%).

The 2007 World Bank study found that food was a major expenditure item for the novostroiki residents (48%), followed by clothing (14%) and public transport (11%). Education represented 5% of expenditures and health 4%. Absolute total monthly expenditures in 2007 were estimated at 6590 som, including:

- food: 3190 som
- clothing and footwear: 900 som
- public transport: 750 som
- education: 344 som
- health: 250 som
- electricity: 210 som
- heating: 180 som.

The food expenditures profile showed that bread and vegetable oil represented more than half of the food expenditures of households with poor food consumption (41% and 17% respectively), followed by potatoes (10%) and sugar (9%). This reflects a diet essentially based on staples and calorie-dense but micronutrient-poor food.

Food expenditures were similar among households with borderline food consumption except that vegetable oil represented a lower share of food expenditures while the share of expenditures on potatoes and meat were higher. This diet would be marginally better owing to the consumption of animal products rich in good quality proteins as well as some important minerals and vitamins.

Bread also represented a large share of food expenditures of households with acceptable food consumption, but it was followed by meat (15% food expenditures). Expenditures on vegetables and fruits were also higher than in the other groups, reflecting a more diversified diet.

Expenditures for meals taken outside the home were low, particularly for households with poor food consumption (1% and 3% in the other groups).



Figure 12: Share of food expenditures in households with poor food consumption

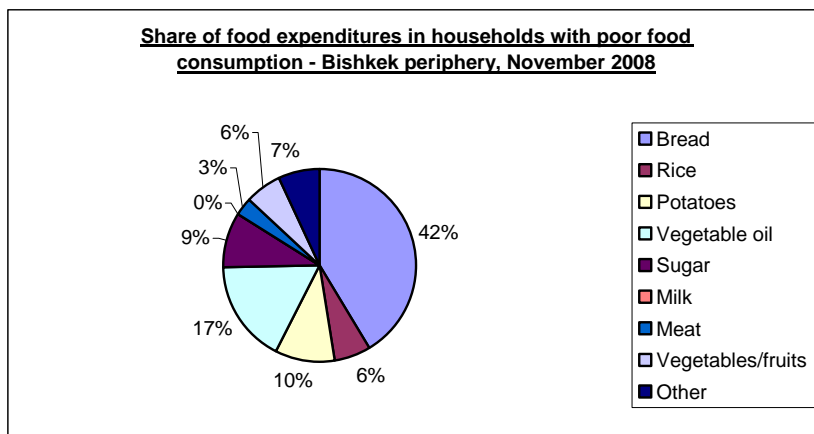


Figure 13: Share of food expenditures in households with borderline food consumption

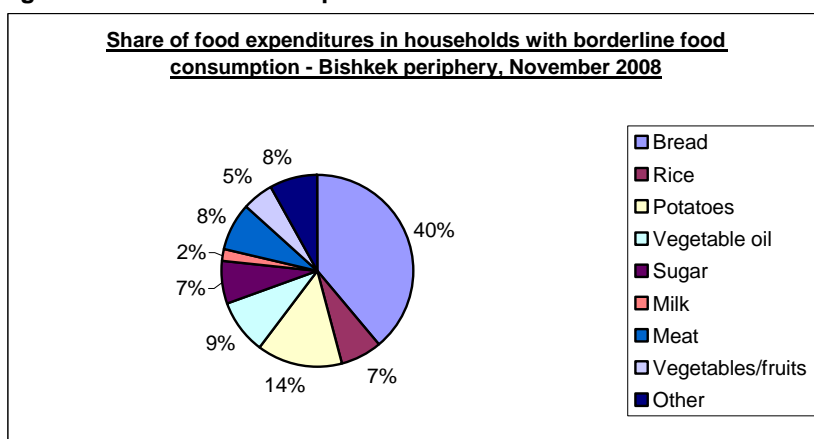
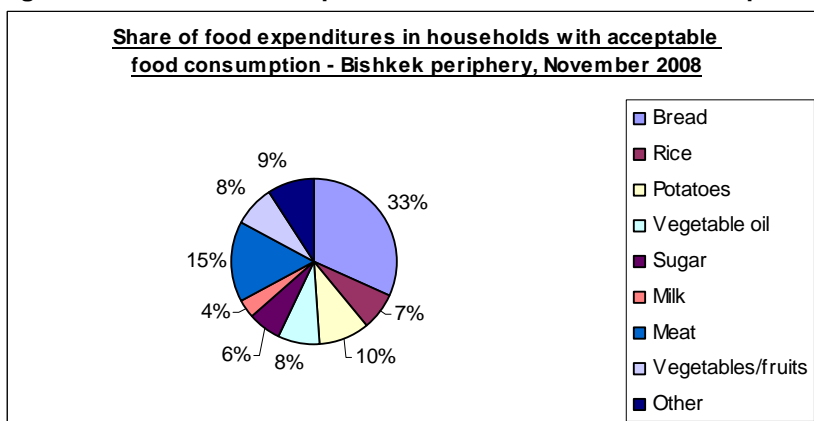


Figure 14: Share of food expenditures in households with acceptable food consumption



#### Non-food expenditures

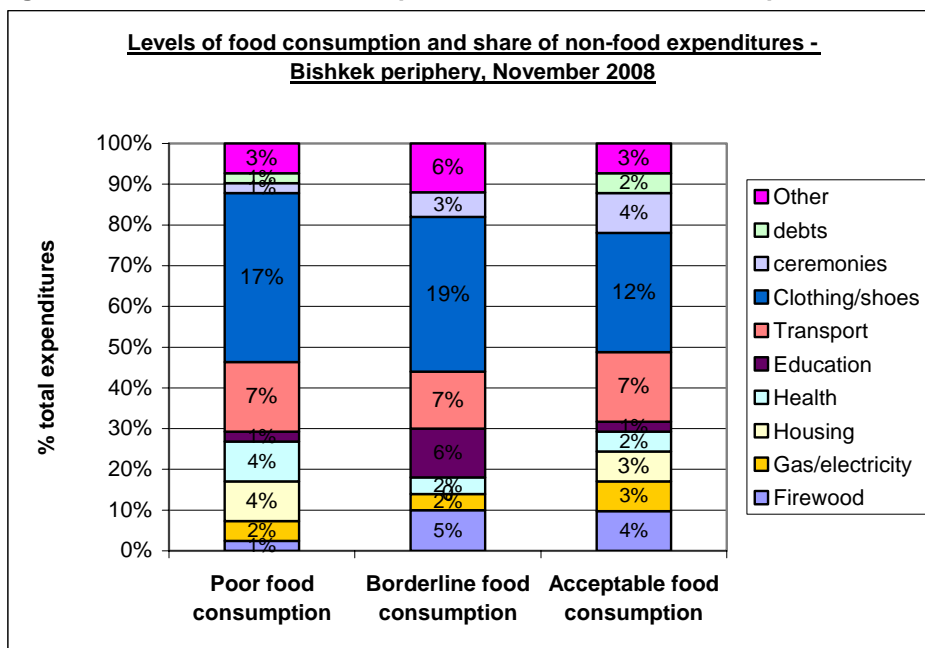
Clothing/shoes represented the highest share of total non-food expenditures for all households, but particularly for those with poor or borderline food consumption (17% and 19% respectively of total expenditures, versus 12% for households with acceptable food consumption). The results are similar to the WB study of 2007 but differ from the KIHS in Bishkek where clothing represented only 5% of expenditures.



Transportation costs were the 2nd highest non-food expenditures for all households (7% of total expenditures), higher than in Bishkek town (3%).

Housing and health represented each 4% of total expenditures of households with poor food consumption, but education and firewood represented larger shares for households with borderline food consumption (6% and 5% respectively). Because of the low number of households in the poor and borderline food consumption groups, these statistics must be taken with caution.

**Figure 15: Levels of food consumption and share of non-food expenditures**



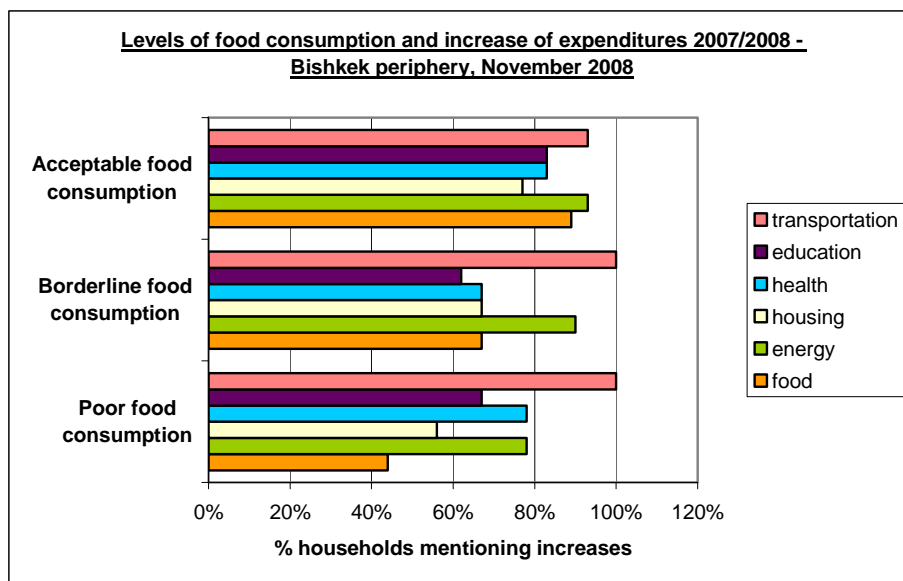
#### Changes in levels of expenditures 2007-2008

The majority of households reported that their expenditures had increased compared to last year. While the small number of households calls for caution, it seems that a larger proportion of households with borderline food consumption reported no changes compared to other households, perhaps because they were better able to adjust their consumption levels by switching to less expensive items and decreasing the consumption of some. Poor food consumption households may have had a lower margin of adaptation given an already low level of consumption, while households with acceptable food consumption may have felt the need to increase their expenditures in order to maintain the same quality of consumption as before.

All households frequently mentioned increased expenditures in energy, transportation, health and education, but households with poor food consumption seemed slightly less likely to mention also increased food expenditures, perhaps because their level of consumption was already too low to enable an increase there.



Figure 16: Levels of food consumption and increase of expenditures 2007-2008



#### 4.3.3 Debts

Households with poor or borderline food consumption were less likely to be indebted than other households (11-14% versus 24% of households with acceptable food consumption), possibly because they had less possibilities to get loans in the first place. The low number of households did not enable to capture possible increases of indebtedness compared to 2007. However, some Focus Group discussions indicated that people were more frequently buying food on credit.

#### 4.3.4 Assets

Most of the 105 households owned at least two domestic assets (television, stove, refrigerator, radio, cell phone). This is consistent with the findings of the 2007 WB study where the majority of *novostroiki* residents had a television (95%), 80% an electric stove, 79% a refrigerator, 46% an electric heater, 37% a gas stove, 33% a car, 32% a vacuum-cleaner, and 20% a telephone.

However, less than 1/3<sup>rd</sup> of the 105 households owned a productive asset (sewing machine, machinery, bicycle, motorcycle or car).

There was no clear relationship between the levels of food consumption and ownership of assets.

#### 4.3.5 Savings and access to a bank account

Savings among the households interviewed are not a reliable cushion against economic or other shocks, as only about 12% of the 105 households had savings in cash or other forms (e.g. jewelry). Surprisingly, 3 of the 9 households with poor food consumption reported having some savings but none of the 21 households with borderline food consumption. However, the level of their savings is likely to be very low.

Less than 5% of the 105 households had a bank account, including none among the households with poor food consumption and only 1 among the 21 households with borderline food consumption. Combined with the quasi-absence of savings, this situation indicates a precarious economic situation of most of the households which essentially live "by the month" and accumulate very little, mostly in the form of domestic assets and possibly the education of children for the "better off".



## 4.4 Social capital

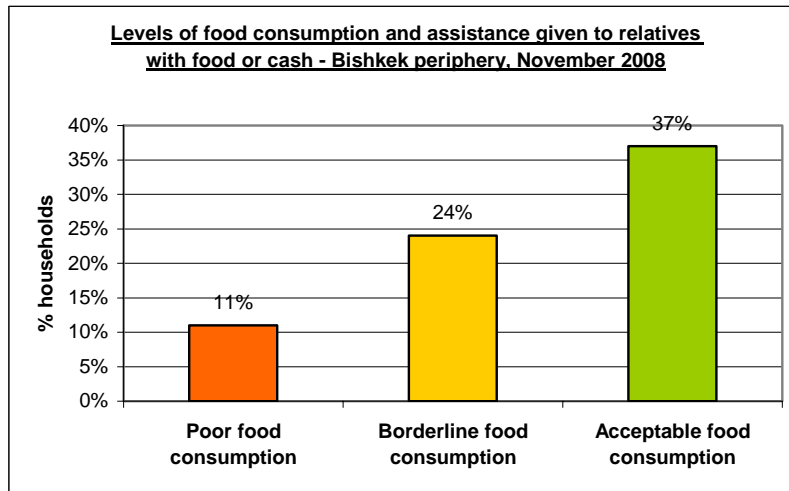
### 4.4.1 Mutual support

Less than 1/3<sup>rd</sup> of the households interviewed could receive food from relatives, neighbours or friends in case they needed assistance and some 20% had received such support during the past year. There was no clear association with the level of food consumption.

According to the 2007 World Bank study, more than half of the households in the periphery of Bishkek had some relatives in the city who helped them (55%). Families enjoying such support were less likely to report difficulties to provide for basic food and clothes.

At the same time, about 1/3<sup>rd</sup> of the households interviewed mentioned that they were themselves helping relatives with food or cash, however this was less likely among those with poor or borderline food consumption.

**Figure 17: Levels of food consumption and assistance given to relatives with food or cash**



### 4.4.2 Receipt of social benefits

#### Registration (2007 World Bank study)

The 2007 World Bank study indicated that while many residents had documents to legalize their land plot and houses, they frequently did not possess a complete package of required documents. Only 40% possessed the area plan and about 25% the household registry ('Brown Book'). The main reasons mentioned for lacking documents were incomplete construction (33%) and lack of money to finalize registration (19%).

Some 71% of *novostroiki* residents had obtained household registration ('*propiska*') which enables eligibility to a number of administrative and social services. Registration rates were much higher among residents of older *novostroiki* built before 2001 (76%) than residents in newest *novostroiki* built after 2001 (45%). Frequent displacement was the main cause mentioned (by 69%) for lacking proper residence registration. Overall, almost 1 out of 3 households lacked residence permit and only 1 out of 3 had registered. The lack of residence permit prevents access to benefits, social assistance, hospitals, schools etc.

#### Government social benefits

Exclusion errors seemed high for the Unified Monthly Benefits (UMB), Monthly Social Benefits (MSB) and other government social assistance (see Annex 3 for details on the programmes): none of the 9 households with poor food consumption and only 2 of the 21 households with borderline food consumption received UMB, MSB or other government social benefits. On the other hand, inclusion errors were also low as only 1 of the 75 households with acceptable food consumption benefited from UMB or other government benefits, and none received MSB.

Among the 3 households receiving UMB, the average amount was 850-900 som/month, i.e. about 60-70% of monthly food expenditures.

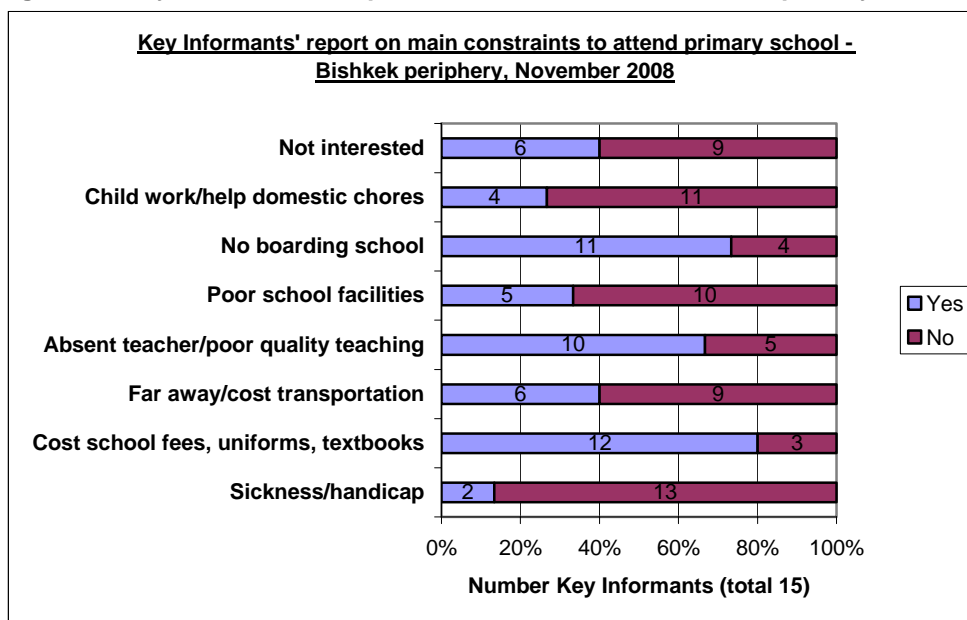


#### 4.4.3 Social infrastructures: schools, kindergartens, hospitals and polyclinics

Most of the Key Informants indicated that primary school-age children were attending a school located within the *novostroika*. There seemed to be a slight improvement in the availability of such schools compared to one year ago.

According to the Key Informants, the main constraints for children to attend school were economic (cost of fees, uniforms and textbooks). However, poor teaching quality and lack of boarding schools were also frequently mentioned.

Figure 18: Key information's report on main constraints to attend primary school



According to the 2007 World Bank study in Bishkek periphery, it was often the case that areas allotted for social infrastructure facilities such as schools and kindergartens were later occupied by new developers.

Access to affordable pre-school care was a big issue for many *novostroiki* residents. Many women indicated that they had to forego work in order to care for their children, or make older children miss school classes in order to look after their younger siblings if parents need to work. Some local schools also denied admission to *novostroiki* children on the grounds of overcrowding and this issue seemed to be growing. Some schools close to the *novostroiki* worked in 2 or even 3 shift and 3-4 children had to share one desk. The number of students often exceeded school capacity by a factor of 2 or 3.

Almost 30% of the respondents indicated that children fail to attend the school. Sickness of children (35%) and remoteness of schools (25%) were the main reason for school non-attendance, together with poor roads and problems with transport. Some 10% mentioned the need to help around the house and take care of younger children. Only 6% indicated lack of money to pay for schooling, 4% could not afford to buy clothes for the child and 3% school supplies.

#### 4.4.4 Community mobilization

The 2007 World Bank study reported about 300 community organizations that functioned in the *novostroiki*, including numerous NGOs, 3 associations and 1 party. In addition, there were self-help groups, courts of elders, associations of women and youth. Most of these public associations were not financially sustainable and not formalized. There was mutual distrust on the part of the public/state sector and the non-governmental sector.

Block heads and territorial self-government units (TOSes) were the 2 most important front-line institutions dealing with *novostroiki* residents and their needs. The overwhelming majority of NS residents preferred dealing with TOSes and block-heads in activities related to community mobilization and local community initiatives. In a number of older *novostroiki*, residents had established local self-help groups with the help of NGOs. There were also active citizen groups and local community-based





institutions such as women councils and *aksakal* courts which played an active role in local mobilization activities. About 16% of residents reported that they had participated in unpaid community work. Besides labour, residents made monetary contributions of about 100-300 som per household.

However, it was often the case that a particular *novostroiki* was not a cohesive community with a well functioning local self-government. The multiplicity of social and cultural identities related to the place of origin and economic status often undermined the ability of *novostroiki* residents to self-mobilize to solve internal development issues.

In most cases, *novostroiki* inhabitants were involved in collective actions that do not require special skills, such as waste collection, tree white-washing and street sweeping, cleaning of irrigation ditches, greening and planting works etc. The '*Ashar*' method was the most widespread. *Ashar* suggests voluntary, temporary joining up of like-minded persons (relatives, neighbours, friends, colleagues) to perform a task. It assumes obligatory contribution of physical labour from each participant, less often financial contribution. The person who invites to take part in the *Ashar* incurs costs to provide a good treat for participants. Another method was 'self-help' groups which unite usually up to 15 persons who set up their own bank account and provide lending on favourable terms to the group members.

The WB study indicated that *novostroiki* areas were pockets of political volatility, especially the *novostroiki* that emerged in 2005 onwards. These *novostroiki* are characterized by strong political participation.

## **V - LIVELIHOOD AND COPING STRATEGIES**

### **5.1 Arrival and permanence in Bishkek periphery**

#### ***5.1.1 Duration of stay in current location***

Only 11% of households in the sample indicated that they had always lived in the periphery of Bishkek. Less than half of the households had spent more than 3 years there (41%), about 22% had arrived 1 to 3 years ago and 21% arrived less than 1 year ago. This indicates a high proportion of relatively 'recent' dwellers, consistent with the findings of the 2007 WB study (see Box).

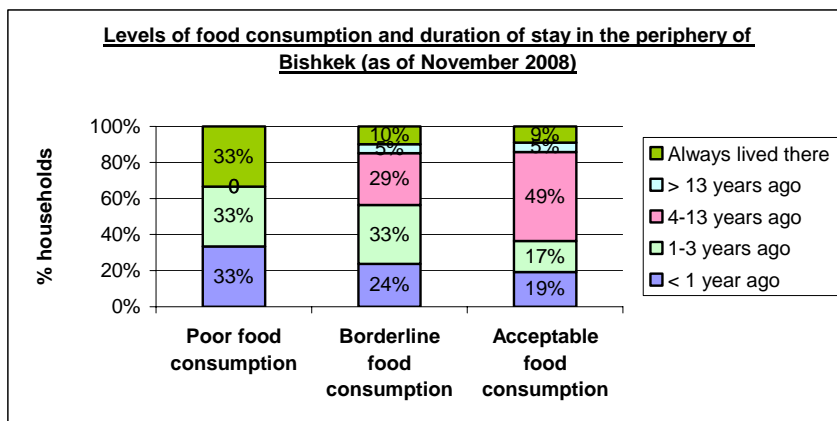
In the 2007 World Bank study, half of the residents had lived in their dwelling since 1-5 years only and 1/3rd for 5-10 years. In some areas in the north and south-west of Bishkek, 60% to 100% of households had been residing in their dwelling for a year or less. Even though all the *novostroiki* residents originally came from rural areas, some 44% had lived in Bishkek for 10-15 years in rented apartments before moving to the *novostroiki*, while 31% came directly from a rural area and 21% from another town (the latter especially in the recently established *novostroiki*, some time after 2005).

The largest share of the population comprised migrants from Chui and Naryn oblasts. In the newest *novostroiki* established in Bishkek before 2001 included, 4 regions were the major suppliers of internal migrants: Chui (38% of current population in these *novostroiki*), Naryn (22%), Talas (11%) and Yssyk-Kul (10%) oblasts. In the newest *novostroiki* established after 2001, Chui and Naryn oblasts continued to remain significant suppliers of migrants (30% and 26% respectively of current residents in these *novostroiki*), followed by Osh (13%), Jalal-Abad (10%), Osh (8%), Jalal-Abad (7%) and Batken (2%) oblasts. It must be noted however that the true number of migrants from Chui oblast is lower as interviewees who had resided in Bishkek before moving in the NS categorized themselves as Chui residents. Some 60% of migrants from Batken and Osh oblasts were women, as men migrated to Russia or Kazakhstan in search for jobs.

Households with poor or borderline food consumption were more likely to have arrived less than 4 years ago, than those with acceptable food consumption. This result probably reflects the need for time to find jobs, access services and social networks. Out of the 9 households with poor food consumption, 6 were in this group of rather recent arrivals (less than 3 years ago) and more than half of those with borderline food consumption.



Figure 19: Levels of food consumption and duration of stay in the periphery of Bishkek



### 5.1.2 Main reasons for coming to Bishkek periphery

About 2/3rds of the households interviewed came to Bishkek periphery in order to find economic opportunities and employment. Few came because they had no accommodation in their former place of residence (17%), for family reasons (10%) or for education purposes (5%). The low numbers of households in each food consumption groups who answered this question does not enable to identify possible differences.

### 5.2 Migration

Very few of the households interviewed had migrant members, and these were only households with acceptable food consumption. However, Focus Group discussions reported an increase in outbound migration as a response to high food costs and increased unemployment.

### 5.3 Crop and animal productions

#### 5.3.1 Cultivation

Own food production was very rare among the households interviewed, especially among those with poor or borderline food consumption. Only 6 of the 105 households were cultivating. None belonged to the groups of households with poor or borderline food consumption. Of the 6 households cultivating, only 2 had planted last season. The higher costs of fertilizer were mentioned by some Focus Group participants as a deterrent to cultivation. Key Informants also confirmed that very few households were cultivating (only in Archa-Besh *novostroika*, for less than 10% of households).

These proportions are much lower than the average found among households in Bishkek town (29% cultivating) and in the WB study of 2007. The differences may be linked to the purposive selection of *novostroiki* in the poorest areas of the periphery.

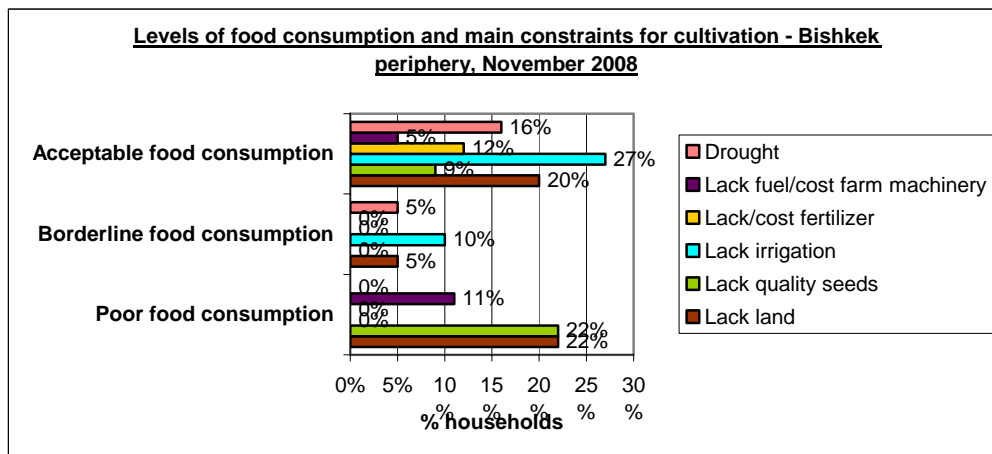
The 2007 World Bank study in Bishkek periphery indicated that almost 80% households had plots of 0.04-0.06 ha and 10% had plots of 0.08-0.14 ha. As a small area is occupied by the houses, the remaining can be used for private subsidiary husbandry and income-generation.

Only 5% had access to irrigation 7 days a week and 89% lacked any irrigation. As a result, at least 40% - if not more - used drinking water for irrigation purposes (water pump in the yard, or central water supply hose).

Lack of land and lack of irrigation were the most frequently mentioned constraints for cultivation mentioned by households (about 20% each). Related to lack of irrigation, more than 10% of households complained about drought. Similar proportions were limited by the cost of fertilizer and the lack of quality seeds.

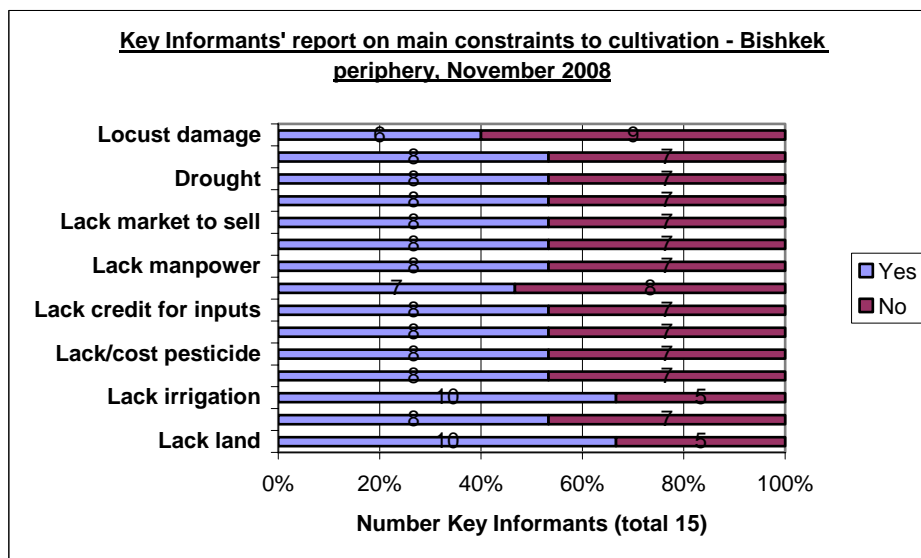


Figure 20: Levels of food consumption and main constraints for cultivation



Key Informants were also likely to mention the lack of land and irrigation as the main constraints to cultivation in the *novostroiki*. However, they were more divided with regards to the other constraints.

Figure 21: Key informants' report on main constraints to cultivation



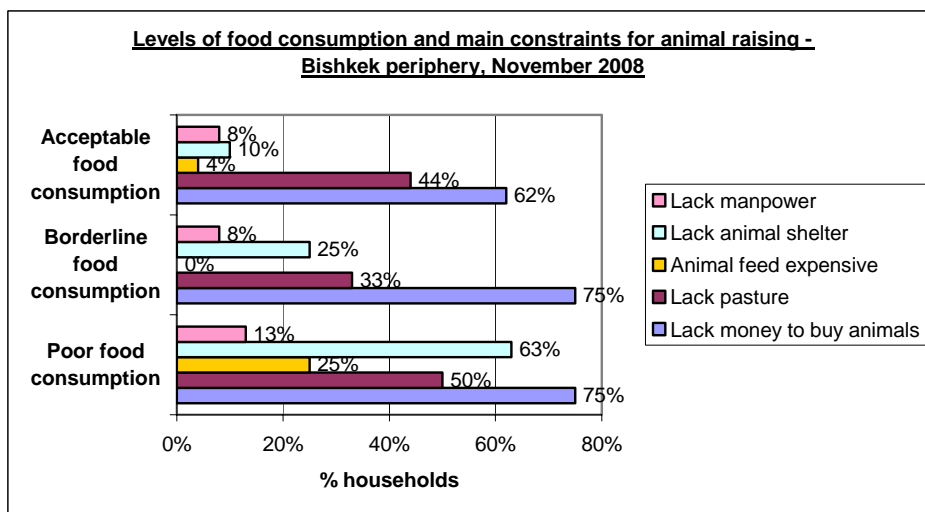
### 5.3.2 Animal raising

Households with poor or borderline food consumption were less likely to own animals. Only 9 out of 105 households owned animals, including none among households with poor food consumption and only 1 of the 21 households with borderline food consumption. The low level of animal ownership was confirmed by the Key Informants. There were no significant changes in animal ownership compared to last year.

Lack of money to purchase animals was the most frequently mentioned constraint to animal raising (2/3rd of households on average, but 3/4th of households with poor or borderline food consumption), followed by lack of pasture for animals (43% of households). Households with poor food consumption also often mentioned the lack of shelter for animals, and the cost of animal feed, reflecting their poorer living (small space) and economic conditions.

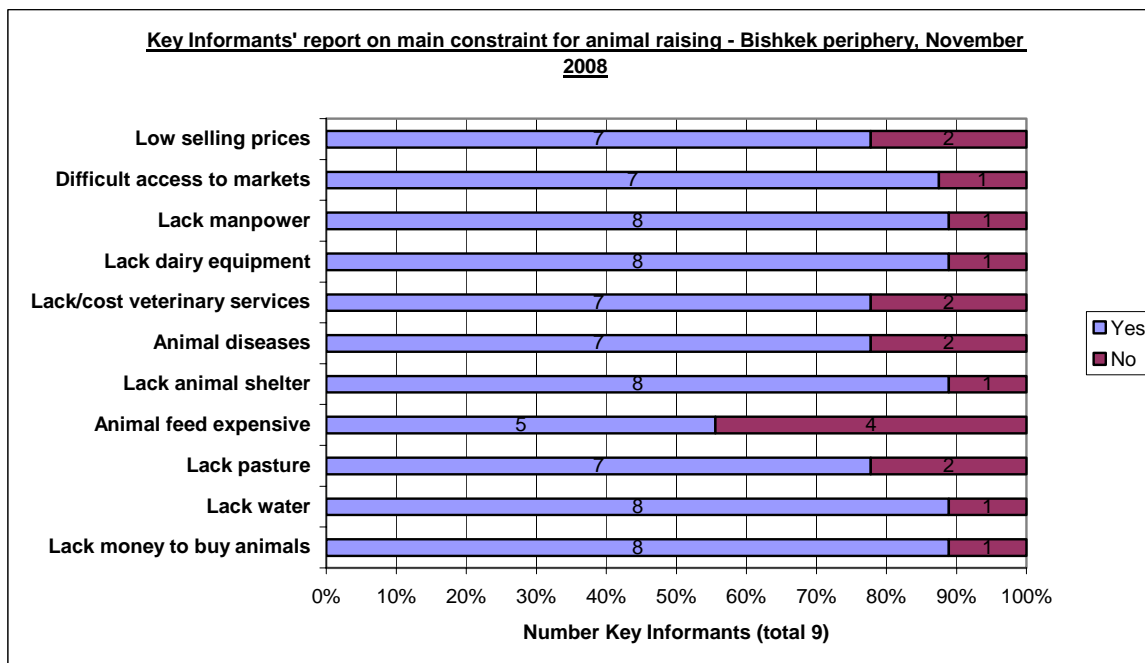


Figure 22: Levels of food consumption and main constraints for animal raising



Although not all of the 15 Key Informants felt knowledgeable about constraints to animal raising, they were more consistent in mentioning a series of practical and economic difficulties for households to maintain animals in the periphery areas of Bishkek.

Figure 23: Key informants' report on main constraints for animal raising



## 5.4 Sources and access to food

### 5.4.1 Sources of food and dependence on the market for food

Practically all food consumed by households in the periphery of Bishkek was purchased. A significant number of households with poor or borderline food consumption also incurred debts for that purpose, while this was much rarer among households with acceptable food consumption. Few households benefited from food gifts from neighbours or relatives.



This finding highlights the vulnerability of households to high food prices. High dependence on markets for food was confirmed by the 15 Key Informants and a similar situation had been noted for the residents of Bishkek town, reflecting the low capacity for own food production in urban areas.

According to the Key Informants, households generally purchased their food in local markets within the *novostroika* (6 out of 15 Key Informants) or in the neighbouring *novostroika* (7 out of 15). Only 2 Key Informants indicated that households bought their food in a local shop within the *novostroika*. The number of local markets in the *novostroiki* seems to have increased over the past year, facilitating access by households.

On average, households with poor food consumption bought slightly less wheat but more potatoes, vegetables and sunflower per capita during the year, compared to other households. This may be because they were less likely to produce their own food (see below) and possibly because they benefited from less food transfers from relatives or other acquaintances, than others. It seems that households with borderline food consumption systematically understated the amount of food that they purchased during the year and the data was not considered reliable.

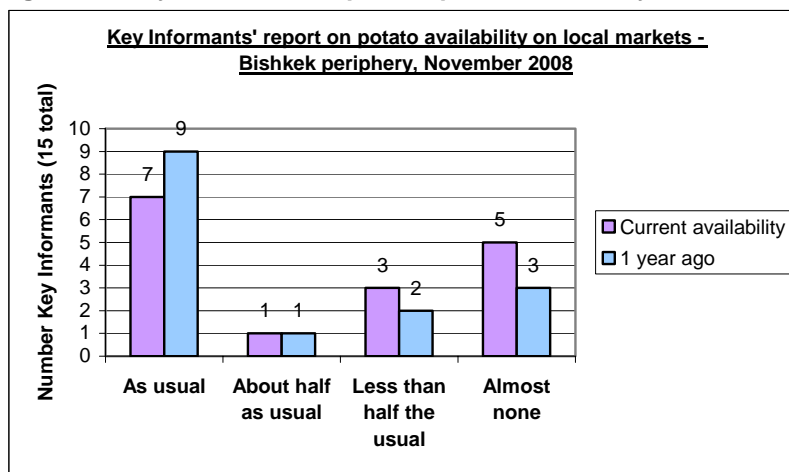
#### 5.4.2 Food availability on markets

At the time of the survey (end October 2008), Key Informants generally indicated a lower availability of food on local *novostroiki* markets than one year ago. While for some commodities this may reflect a poorer harvest this year (potatoes, wheat), for most others (rice, meat and dairy products), it rather indicates a lower offer by traders in a context of decreased demand by households spurred by the high food prices.

Specifically, Key Informants described food availability on local markets in the *novostroiki* as follows:

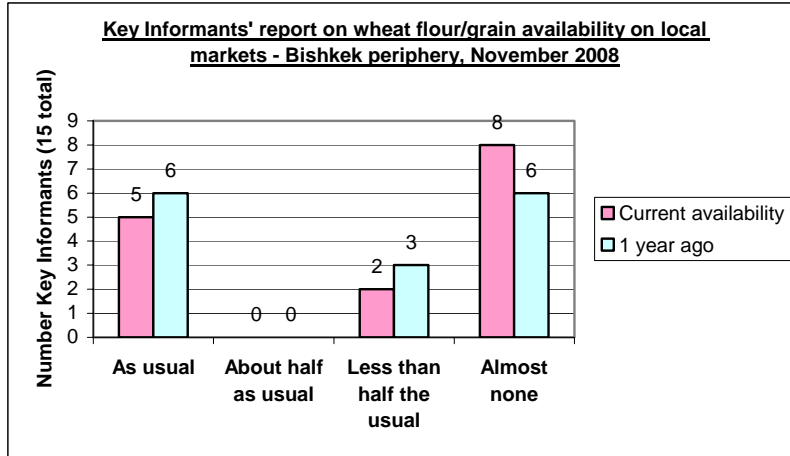
- potatoes: 7 out of 15 Key Informants reported availability 'as usual', while 5 indicated that they were practically not available; compared to the year before, a lower number of Key Informants reported potato availability being 'as usual';
- wheat flour/grain and rice: 5 out of 15 Key Informants reported availability 'as usual', while 8-9 indicated that it was practically not available; similarly as for potatoes, a lower number of Key Informants reported wheat flour/grain and rice availability being 'as usual' compared to the year before;
- milk, dairy and meat products: the majority of Key Informants (10 out of 15) reported no/very low availability and only 3 indicated that availability was 'as usual'; compared to one year ago, more Key Informants reported no/very low availability.

Figure 24: Key informants' report on potato availability on local markets





**Figure 25: Key informants' report on wheat flour/grain availability on local markets**



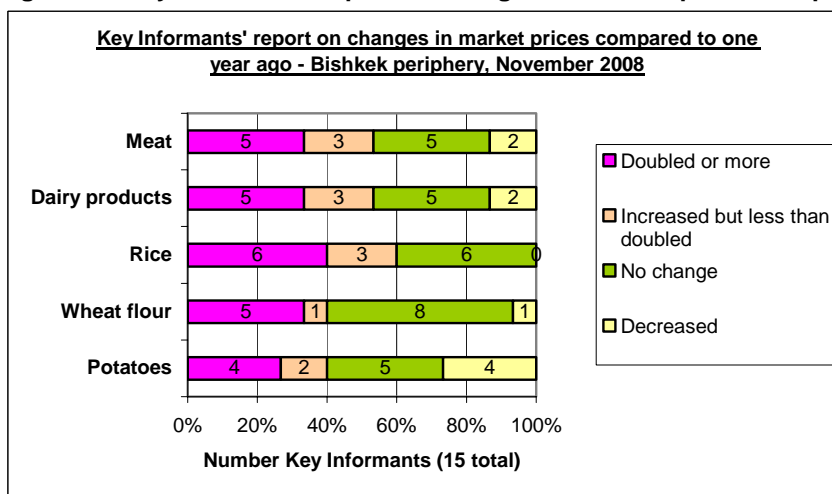
### 5.4.3 Food prices on local markets

The evolution of prices on local markets in the *novostroiki* was perceived differently by the various Key Informants. Generally, Key Informants were less likely to report major price increases compared to one year before, than 'no changes'. This may be explained by the fact that food prices started to decline internationally and in Kyrgyzstan at the time of the survey. Furthermore, the survey took place in the post-harvest period when prices on markets tend to be lower. It may also be that the bulk of the price increase took place more than one year ago. However, the differences of opinion of Key Informants are difficult to explain.

Specifically:

- potatoes: 4 out of 15 Key Informants indicated a large increase of price (doubled or more compared to one year ago), 2 a moderate increase, 5 no change and 4 a decrease;
- wheat flour: 5 out of 15 Key Informants reported a large price increase, 1 a moderate increase, 8 no change and 1 a decrease;
- rice: 6 out of 15 Key Informants indicated a large increase of price, 3 a moderate increase and 6 no change;
- meat and dairy products: 5 out of 15 Key Informants indicated a large price increase, 3 a moderate increase, 5 no change and 2 a decrease.

**Figure 26: Key informants' report on changes in markets prices compared to one year ago**





#### 5.4.4 Household food stocks

Many households had staple food and preserved vegetables in stock for family consumption. This is explained by the close ties kept with relatives in the original villages. It must be noted however, that some households may have referred to stocks physically held in the village of origin and shared between migrants and village family members, hence explaining the large stocks sometimes mentioned.

Bearing this caveat in mind, results indicated that households with poor or borderline food consumption had lower food stocks than households with acceptable food consumption, reflecting their lower capacity to buy large amounts or to maintain close links with rural relatives. On average, these households had stocks of wheat, potatoes and preserved vegetables for 4-5 months, compared to 8-11 months for other households. Around 60% of households with poor or borderline food consumption had wheat stocks for less than 3 months, compared to only 6% of households with acceptable food consumption.

Figure 27: Levels of food consumption and duration of wheat stocks for consumption

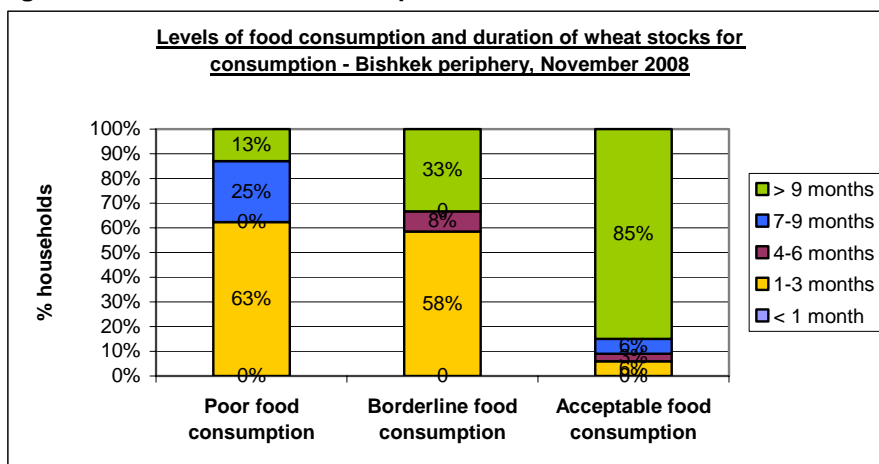
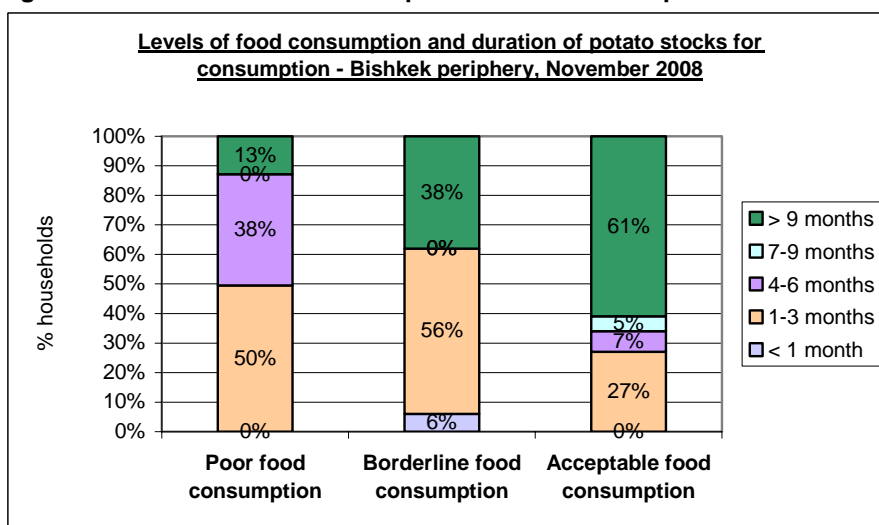


Figure 28: Levels of food consumption and duration of potato stocks for consumption





## 5.5 Terms of trade

### 5.5.1 Animals

Probably due to the small number of households engaged in animal raising in the *novostroiki*, few Key Informants were aware of the prices of live animal on markets. Among those who knew, most felt that prices had not changed, while a few indicated an increase. Given that the price of food had increased, this would mostly result in a deterioration of the terms of trade for the few households relying on the sale of cattle or small ruminants for part of their income.

### 5.5.2 Wages

According to Key Informants, the average daily wage for unskilled agricultural labour was 150 som/day, up from 90 som one year ago (67% increase). Daily wage for unskilled non-agricultural labour was higher at 270 som/day and had also increased compared to one year ago (140 som, a 90% increase).

While the absolute levels of these wages are low, their increase is likely to have mitigated some of the effects of the food and fuel price rise. Nevertheless, as more people were looking for work in order to augment their income, the pressure for jobs also increased and unemployment was on the rise as well, as mentioned by several Focus Groups.

## 5.6 Exposure to shocks and vulnerability to high food and fuel prices

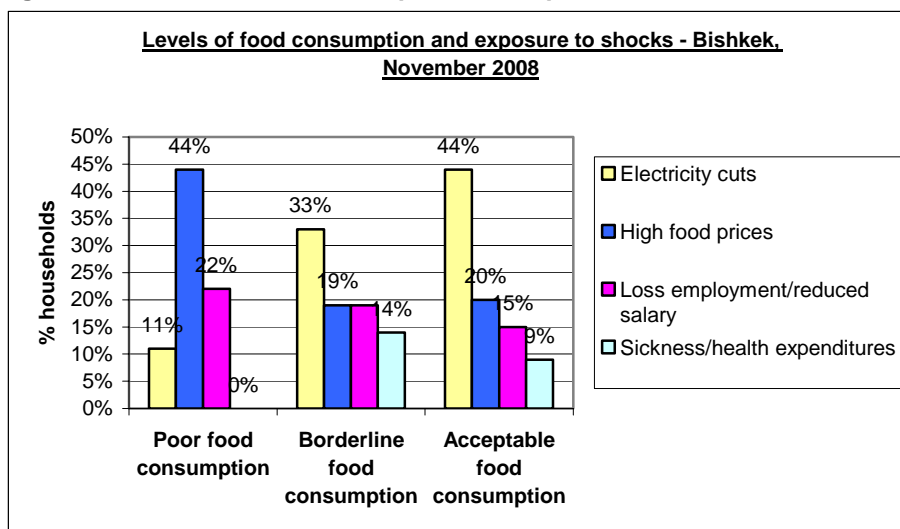
### 5.6.1 Main shocks

Combining all shocks (primary, secondary and tertiary), almost 2/3rd of households were affected by electricity cuts and high food prices, 1/3rd by loss of employment/reduced salary and high fuel/transportation costs, and 1/5th by the sickness/health expenditures.

Sickness of a household member, electricity cuts, high food prices and loss of employment or reduction of salary were the primary shocks most frequently mentioned by the 105 households interviewed. High food prices, electricity cuts, loss of employment/reduced salary and sickness of health members were also frequently mentioned as secondary or tertiary shocks, together with high fuel and transportation costs.

These results indicate that covariant shocks (power shortages, high food prices, reduced purchasing power) affecting all households contributed the most to food and economic difficulties. They were worsened in some cases by idiosyncratic shocks (sickness of a member) affecting single households.

Figure 29: Levels of food consumption and exposure to shocks







### 5.6.2 Groups vulnerable to high food and fuel prices

Focus Group participants singled out some inhabitants of the periphery who were “better off” than the others, including those involved in trade, taxi drivers (regular cash income), electricity controllers (opportunity for bribes), public minibus drivers (higher fees), and migrants back from Russia and Kazakhstan (higher salaries). Discussions identified pensioners, civil servants, large families, single mothers, unmarried persons, disabled and orphans as well as those unemployed and recently arrived families as the most vulnerable in the context of higher food and energy prices.

*'Let us make simple calculation. The highest monthly income that we get is 6,000 som. Let us take a family of 4 with 2 children. [Food costs] 50 som per person per day. Multiply 50 by 4 – 200 som a day. One needs 200 som a day for food alone. Multiply 200 som by 30 days – 6,000 som. So it is enough only for food.'* – Focus Group in Ak-Bata.

*'Families with many children and single mothers don't always have opportunity to earn money. Since they need special working hours, nobody wants to hire them even if there is a vacancy. They lack food.'* – Focus Group in Ak-Tilek

They also identified individuals/households unable to benefit from any assistance due to the lack of proper documents, residence registration, and location in temporary squatter settlements (recent arrivals) as requiring support.

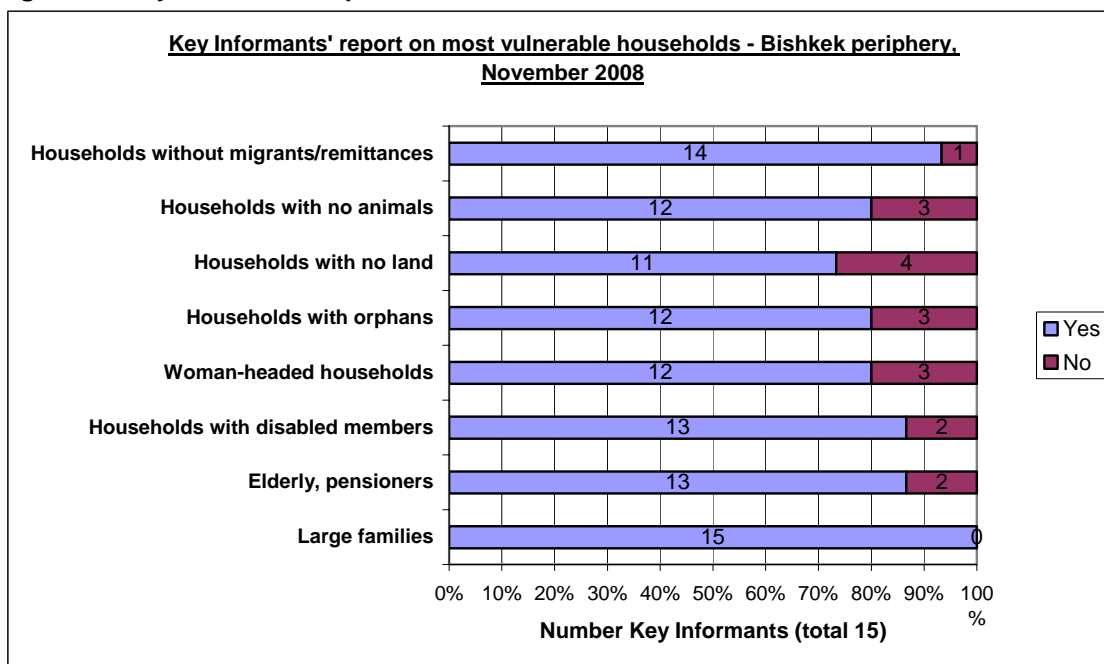
*'There are illiterate residents, people with limited education who don't understand, are afraid of going to government institutions. They need explanations about everything.'*

*'People who did not properly register their houses don't receive anything. Sometimes people simply don't have money for registration services. May be they built their houses on disputed territory and that is why they cannot register documents for a house or a plot.'* – Focus Group in Kara-Jygach

*'Tenants don't get any help, they don't have residence permits.'* – Focus Group in Ak-Tilek

Key Informants largely confirmed the greater vulnerability of these groups and added those with no migrants (not receiving remittances).

**Figure 30: Key informants' report on most vulnerable households**





## **5.7 Coping strategies**

About half of the households reported difficulties during the past years to meet food and other essential needs. The proportion seemed higher among households with borderline food consumption, perhaps because those with poor food consumption could hardly get worse.

### **5.7.1 Changes in income sources**

During the year, households mostly activated 'positive' coping strategies in response to their food and economic difficulties. The most frequent strategy used by more than half of households with poor or borderline food consumption was to seek alternative or additional jobs or work more hours. This strategy was not always successful, due to high unemployment rates and to the low returns obtained, as emphasized in Focus Group discussions.

*'We live near Dordoi market. It sustains us. Some of us clean the garbage at the market, some have opened a bath house and have income from that, some collect boxes and sell them, some cook pastries for sale. But it is the owners of container shops at the bazaar who make the most money. Of course you won't find these people living in our community!' – Focus Group discussion in Dordoi*

Among households with acceptable food consumption, less than 1/3<sup>rd</sup> sought alternative or additional jobs and very few mentioned other types of coping strategies, reflecting their capacity to mobilize some savings and networks of support.

### **5.7.2 Changes in patterns of expenditures**

Several Focus Group participants reported decreased expenditures on clothing.

A more detrimental coping strategy was the decrease of health expenditures, which was done by almost 30% of households with borderline food consumption. Few sold domestic assets and even less used damaging coping strategies such as selling productive assets or taking children out of school. Yet, some Focus Group participants mentioned that their children were helping them with some income-generating activities (e.g. sewing, making boxes) and also indicated savings made on education and health expenditures.

*'We started saving on hot meals – using electricity or coal is expensive- and clothing for children. We don't make contributions for children's schooling.' – Focus Group in Ak-Bata*

### **5.7.3 Changes in patterns of food consumption**

Looking at the 7 days prior to the assessment, it appears that relatively few households decreased the amount of food consumed. However, Focus Group discussions confirmed that people were buying cheaper, less nutritious products. This is coherent with the high share of expenditures for staples and low expenditures on meat, dairy products, vegetable and fruits among households with poor or borderline food consumption.

*'We buy potatoes, onions and tea often. Fruits we buy rarely. In the best case we can buy fruits for children once a week'. 'Bread, flour, potatoes, tea – are the main and only food for us. Meat, fruits and vegetables are rare.' – Focus Group in Ak-Bosogo.*

*'We often end up buying pasta. We consume more pasta (macaroni) and less of meat and butter' – Focus Group in Kalys Ordo*

*'Pasta products used to cost 25-28 som a kilo, but now 40 som. We don't buy meat at all. The share of meat in the diet declined, while the share of bread and potatoes increased'. – Focus Group in Kelechek*

The relative protection of food intake also involved the purchase of food on credit and buying smaller quantities but more often. Focus Group discussions also reported support with food received from relatives in rural areas.

*'We don't buy regularly as we used to. We used to make more stock before. This year, we buy food in small quantities.' – Focus Group in Archa-Beshik*



Yet, the relatively low proportion of households having decreased the quantities of food consumed reflects some resilience capacity of the households, also consistent with the fact that few were using strategies that would affect their future livelihoods.

More specifically:

- only 3 out of the 9 households with poor food consumption reduced the number of meals eaten in a day (seldom), 2 decreased adults' food intake to protect children's (seldom), 1 limited portion sizes at meals (seldom), and 1 relied on less preferred, less expensive foods (seldom);
- of the 21 households with borderline food consumption, 9 purchased food at credit (seldom), 5 skipped entire days without eating (seldom), 6 limited portion sizes at meals (2 seldom, 3 often and 1 always), 4 relied on less preferred, less expensive foods (3 seldom, 1 often); 3 restricted adults' food intake to protect children's (2 seldom, 1 always);
- more than 40% of households with acceptable food consumption purchased food at credit (40% seldom, 3% often, 1% always), 27% received food gifts from relatives or acquaintances (23% seldom, 4% often) and 15% reduced portion sizes at meals (11% seldom, 4% often).

#### **5.7.4 Changes in patterns of migration**

Most of the Key Informants (11 out of 15) and several Focus Groups mentioned an increase in external migration and the benefits resulting for the remaining family. However, participants also raised concerns with migration procedures as well as uncertainty about what would be sent back. Key Informants indicated that migrants mostly went outside the country.

*'It has become more difficult to live here. We send our husbands abroad and don't know what will be tomorrow and whether they will come back and, most importantly, what they will come back with' – Focus Group in Kara-Jygach.*

*'There is no work. People look for seasonal work to make big money and put it away for future. Many migrate where possible. But we heard that migrants are no longer welcome in recipient countries. What will we do, how shall we live?' – Focus Group in Dordo.*

At the same time, most Key Informants (12 out of 15) reported new arrivals of households in the novostroiki over the previous years, essentially coming from other oblasts. This pattern reflects the continuous flow of new internal migrants attracted to the periphery of Bishkek by the work opportunities.

#### **5.8 Receipt of assistance**

Most Focus Group participants felt that the Government was not sufficiently helping households to deal with the problem of high food and fuel prices.

This was coherent with the household survey which showed that non-government food and non-food assistance benefited few households and did not seem geared towards supporting the neediest households.

Overall, slightly less than half of the 105 households interviewed were receiving food rations at the time of the assessment (surprisingly, this type of assistance was not mentioned by any of the 15 Key Informants). Targeting was imperfect, as households with poor or borderline food consumption were less likely to receive them than households with acceptable food consumption. On the other hand, households with poor or borderline food consumption were more likely to be enrolled in food- or cash-for-work special programmes, but the number of beneficiaries of these programmes was low (2 out of 9 households with poor food consumption, and 2-3 out of 21 households with borderline food consumption).

Quite many Key Informants (9 out of 15) indicated that a school feeding programme was active in the neighbourhood, but the small number of households with school-age children in the sample resulted in a small number benefiting from this assistance: 1 each among households with poor or borderline food consumption, and 11 of the 75 households with acceptable food consumption.

Specific nutritional programmes for malnourished or vulnerable individuals, or assistance with few health care were practically never mentioned.



Feedback from Focus Group discussions was generally critical about the little assistance provided, including poor quality clothing and insufficient economic support to the most vulnerable.

*'Help is provided to families with many children. They get coal. But it is not for free, it is by vouchers. There are 3 trucks, the only difference is that with a voucher you get coal without standing in the line, but otherwise we pay same price – 2800 som. Clothes are provided, very old clothes from America. It is shameful to wear such clothes in front of other people.'*

*'Families with many children get 50% discount in school. First graders and second graders get lunch in the form of a bun and tea.' – Focus Group in Archa-Beshik*

*'The government gave cheap flour several times, but not all could buy it. There are 1,200 persons in our community and only 450 could buy that flour, more than half couldn't.' – Focus Group in Kalys Ordo*

## **VI - CONCLUSION ON THE FOOD SECURITY SITUATION AND PERSPECTIVES**

### **6.1 How many, who, where and why are households food insecure?**

#### **6.1.1 Number of food insecure**

Based on food consumption patterns, the rapid assessment estimated that **9% of households in the selected neighborhoods** of the periphery of Bishkek were severely food insecure (diet very inadequate in terms of proteins, vitamins and minerals) and 20% were moderately food insecure (diet still unsatisfactory but marginally better). The selected neighborhoods were presenting worse infrastructure and self-assessed poverty levels than other neighborhoods and would thus be expected to reflect the “worst” socio-economic conditions in the periphery of Bishkek. On the other hand, because it was not possible to combine the food consumption data with food access data as was done for the previous food security analysis covering the whole of Kyrgyzstan, it may be that the estimated proportions of food insecure households are lower than if economic access to food had also been considered.

Bearing the above caveat in mind, an approximate extrapolation of the results of the rapid assessment to the whole population of Bishkek periphery (29,150 households, 125,000 persons) leads to some 11,250 persons (2624 households) severely food insecure and 25,000 persons (5,830 households) moderately food insecure. These numbers may be on the low side as the true population living in the periphery of Bishkek is suspected to be larger due to the high number of semi-permanent residents ('long-term hosts').

#### **6.1.2 Who are the food insecure?**

The rapid food security assessment identified smaller households as being more likely to have poor or borderline food consumption. This is in contrast to the findings of the nation-wide food security analysis and to the perception of Focus Group participants and Key Informants that large families are more vulnerable. The discrepancy may be due to the small sample of households interviewed (not enough small or large households to distinguish differences). It may also be that in the periphery areas it is more beneficial to have many household members than elsewhere as it multiplies the possibilities to earn some income.

While the proportion of female-headed households was lower in the periphery areas of Bishkek than in Bishkek town (20% versus 48%), they were more likely to have poor or borderline food consumption than male-headed households. This difference was not observed in the nation-wide food security analysis, possibly because of the smaller proportion of households receiving remittances in the periphery of Bishkek.

Widowed, divorced or separated heads of households were more likely to have poor or borderline food consumption than married heads of households. This was also associated to being a woman head of household and with a small number of household members.

Households and individuals unemployed or depending on fixed, low income sources (pensions, low civil service salaries, disability or orphan allowances) were more likely to be food insecure in the context of increased food and fuel prices, due to the decrease of their purchasing power.



Recently arrived families were more likely to be unemployed or relying on low-paid occupations, and to be excluded from government social assistance programmes, and thus at high risk of food insecurity.

### **6.1.3 Why are they food insecure?**

Food insecure households (poor or borderline food consumption) in the periphery of Bishkek essentially lacked income to purchase sufficient, good quality food to enable a proper diet for all their household members and to improve their living conditions (particularly housing and connections to services such as running water, regular electricity and sewage).

Households in the periphery of Bishkek, and especially the food insecure, have very limited possibilities of crop and animal productions and fully depend on the market for their food. They are thus highly vulnerable to increase of food prices. Households with poor food consumption dedicate up to 60% of their total expenditures for food, leaving a very small margin of maneuver in case of further price increases and for non-food expenditures.

Traders seem to have decreased the supplies of some commodities in local neighbourhood markets in response to lower household effective demand. This limits the availability and may put further upward pressure on the prices of some food items including nutritious food such as meat and dairy products.

The lack of income results from difficulties to secure regular, well-paid jobs. Location at a long distance from public transportation systems, insufficient or inadequate education compared to skills demanded on the labour market, poor social network connections (also linked to recent arrival), and increased competition for jobs in the context of higher cost of living due to food and fuel price rise, contribute to unemployment and low paid occupations. Although out-migration increased in response to worsening economic conditions, few households seem to benefit from remittances.

Food insecure households have no savings or very small amounts and few valuable domestic assets that could help them to cushion economic shocks.

Economic constraints limit access of food insecure households to health insurance and health services. They are also more likely than others to decrease health expenditures in order to meet their food needs. Their limited access to running water and difficulties to meet heating and cooking fuel costs does not facilitate adequate hygiene practices, further compounding their risks of disease and malnutrition.

Some community social structures exist within the neighbourhoods and support from relatives or friends is received by about one out of five households. Food insecure households are less likely to benefit from this type of assistance.

A number of food insecure households also do not obtain the necessary official documents (registration) to get access to government social benefits because they arrived rather recently, or because they settled on illegal land, or because they lacked education and information on administrative procedures. In fact, most of the food insecure households do not receive government benefits. Although these benefits are reportedly low, they represented more than 70% of the current food expenditures of beneficiaries interviewed, and would thus be expected to make a significant difference for the poorest.

### **6.2 How severe is the food security situation in the periphery of Bishkek?**

The diets of food insecure households are clearly lacking essential vitamins and minerals – especially when the diet is qualified as ‘poor’. Such diets decrease resistance to infections and increase risks of acute malnutrition in the short term among young children who combine this poor food intake with a small number of feeding occasions and with infectious diseases. On the medium term, poor and borderline diets will increase the rates of stunting, with long-term consequences on livelihoods (learning and income-earning capacities) and health.

The purchasing power of food insecure households was negatively affected by the rise of food and fuel prices. While most households employed ‘positive’ coping strategies such as multiplying the income sources and increasing working hours as much as possible, they also jeopardized their nutritional and



health status by giving preference to high-energy, lower nutritional quality food (cereals, oil and sugar instead of meat and dairy products, fruits and vegetables) and by decreasing their health expenditures.

In the 1st quarter of 2008, the rate of underweight among under-5 children was high in Bishkek (4.2%) compared to other locations of the country. Given the poorer environmental conditions in the periphery areas of Bishkek, similar rates of malnutrition – if not worse – can be expected among children in the periphery, especially those living in households with poor or borderline food consumption.

Of the 15 Key Informants interviewed, slightly more than half (9) were of the opinion that the residents' difficulties were similar this year as last year, while the rest (6) thought that they were worse now. Food and fuel price rises were the main reasons identified for a worsening of the situation. However, the main difficulties identified through Focus Group discussions and household interviews were structural and chronic rather than specifically linked to the high food and fuel prices. Inflation and higher costs of food and utilities worsened the already existing economic difficulties of households, particularly those identified as vulnerable due to their demographic (e.g. large families), physical (e.g. disabled), social (e.g. orphans), or economic (e.g. dependent on fixed pension or fixed salary, unemployed, recently arrived) characteristics.

**Structural problems included:**

- lack of jobs;
- poor housing conditions;
- lack of access to drinking water and frequent electricity cuts;
- lack of access to irrigation for small-scale cultivation;
- lack of schools and kindergartens, and low teaching quality;
- lack of nearby medical facilities and insufficient number of health personnel and drug supplies.

*'We have 20-hours a day electricity blackouts. There is no such situation in the city, but we are treated as third class people – anything can be done to us. Once you say you live in a settlement, you are immediately treated badly.'* – Focus Group in Ak-Tilek

Some Focus Group participants compared the current situation with the immediate post-independence years where electricity, water and social services collapsed. However, they also stressed the lack of progress since then, instead of a sudden deterioration.

These various results indicate that high food and fuel prices have compounded the chronic food and economic insecurity of about 1/3rd of the population living in the periphery of Bishkek, but so far their situation has not dramatically worsened. However, while the current situation of households in the periphery of Bishkek is not life-threatening, risks are sufficiently high for health, nutrition and livelihoods to warrant interventions (see Section 7.2).

**6.3 How different is the situation in the periphery of Bishkek from other urban areas?**

The results of the Rapid Food Security Assessment (RFSA) in the periphery of Bishkek cannot be generalized to the periphery areas of other towns or to urban areas of Kyrgyzstan in general, for reasons explained below.

The results of the RFSA cannot be extrapolated to other town peripheries due to differences in the size and profile of the population in the periphery area of Bishkek as well as in the economic opportunities and services offered by Bishkek town (capital) compared to the peripheries of other towns. For this reason, it would be important to conduct a similar RFSA at least in Osh, the 2nd major town of the country, to ascertain the extent of food insecurity and compare with the situation around Bishkek. The main differences identified between Bishkek and Osh peripheries through the World Bank study of 2007 are summarized in Annex 1 and in the Box below.

The 2007 World Bank study was conducted in the peripheries of Bishkek and Osh, using the same random sampling approach and data collection tools in both towns. While a number of results were similar, important differences were noted between the two with likely implications on the food and economic situation of households. It is not possible however, to judge whether these differences would rather worsen or improve the food security situation of households in Osh periphery compared to Bishkek periphery. The main variations included:

- size of the population in the periphery areas;



- origin of the population;
- household size and composition;
- education, sex and marital status of the heads of households;
- access to support from relatives;
- level of poverty (subjective evaluation);
- access to water and electricity;
- social cohesion within the neighbourhoods;
- share of essential expenditures out of total expenditures; and
- ownership of domestic assets.

The periphery of Bishkek is not included in the quarterly nation-wide survey KIHS conducted by the National Statistics Committee, due to the lack of reliable sampling frame<sup>12</sup>. While the present assessment aimed to fill the gap on the food security situation of households in the periphery of the capital city, due to time constraints it was not possible to replicate the extensive data collection of the KIHS. Because indicators used to estimate food insecurity were different, the results of the in-depth food security analysis done for urban and rural areas of Kyrgyzstan using the KIHS data cannot be directly compared to the results of the rapid food security analysis done in the periphery of Bishkek.

Besides methodological considerations, the type of population, infrastructures and services available in the periphery of Bishkek differ from those within Bishkek or within other urban centres and thus prevent a generalization of the results of the RFSA to non-periphery urban areas. Indeed, a number of characteristics of inhabitants of Bishkek differed from those observed among the inhabitants of Bishkek periphery, as summarized in Annex 3. It is assumed that poverty is higher in the periphery areas of the capital city due to the fact that many inhabitants are migrants from already impoverished rural areas who lack education and networks to obtain well-remunerated employment. Furthermore, the *novostroiki* are less well endorsed with proper infrastructure (particularly roads) and basic facilities such as running water, reliable electricity supply, sewage, schools and health centres. A number of residents also lack the official documentation that would enable them to be enrolled in the government social assistance programmes.

Rather than making decisions based on incorrect comparisons of the *proportions* of food insecure households in the periphery of Bishkek (estimated through the RFSA) with the proportion of food insecure households in urban and rural areas estimated through the re-analysis of the KIHS, it is preferable to decide on interventions on the basis of estimated risks and characteristics of the affected population groups.

#### **6.4 What are the anticipated shocks and measures already taken?**

##### **6.4.1 Main anticipated shocks**

The main shocks anticipated to affect the population living in the periphery areas of Bishkek are listed in the table below. The most likely one is power shortage, affecting electricity and thus water supply, heating and possibly cooking facilities. The main consequences would be on hygiene and health due to increased risk of infectious diseases. Food security would be indirectly affected through disease as well as through preferential allocation of time and financial resources to collection of water and alternative fuel to the detriment of care practices for young children and other vulnerable household members, and possibly schooling.

Food prices have become to ease down since the end of summer of 2008 and may not inflict an additional shock to households. Nevertheless, they are expected to remain higher than 'usual' and will thus continue to put a strain on households whose purchasing power has not increased, or whose income sources have benefited from limited upward adjustment. This will prevent any improvement in the diet of the already food insecure households.

While social unrest is not of immediate concern, security in the periphery areas of Bishkek was mentioned by almost 20% of the households as their main priority. Should the economic situation of households worsen (see Section 6.5.2), some violence on the part of unemployed or gang groups cannot be fully excluded.

<sup>12</sup> A census will be carried out in 2009 and should enable the incorporation of these areas in future KIHS.



**Table 7: Anticipated shocks and impacts on the food insecure in the next 6-12 months**

Anticipated shock	Likelihood	Impacts on the food insecure
<b>Energy deficit and associated electricity cuts</b>	High	<ul style="list-style-type: none"> <li>• Disruption of heating and water supplies, with negative effects on health</li> <li>• Increased expenditures for alternative heating and water sources;</li> <li>• Decreased school attendance for lack of heating and water</li> <li>• Disruption of industrial functions, with negative effects on employment and income</li> </ul>
<b>Resumption of food and fuel price increase</b>	Medium-high	<ul style="list-style-type: none"> <li>• Decreased purchasing power, unless real incomes and other benefits are adjusted to match the price increase. However such a measure will increase inflation.</li> <li>• Decreased amount of food bought and consumed</li> <li>• Switch to less expensive, less nutritious food, with increased risks of mineral and vitamin deficiencies</li> <li>• Crowding out of expenditures on health and education to meet increased food costs, with negative effects on the use of health services and schooling</li> <li>• Further deterioration of nutritional status of vulnerable individuals</li> <li>• Increased migration abroad</li> <li>• Sales of domestic and other assets</li> <li>• Increased impoverishment</li> <li>• Search for additional income sources, with potential negative effects on school enrolment and attendance, and on care practices</li> </ul>
<b>Social unrest</b>	Low	<ul style="list-style-type: none"> <li>• Forced displacement</li> <li>• Loss of assets</li> <li>• Disruption of food markets</li> <li>• Loss of income</li> <li>• Increased impoverishment and food insecurity</li> </ul>

#### 6.4.2 Measures already taken

Key Informants have reported an increase of the level of wages for unskilled daily labour. Some households have also indicated that they received food assistance but targeting appeared to be poor. At central level, the Government has taken a series of measures to increase the level of pensions and other allowances, as summarized in the Box below.

#### **Box No2 – Measures taken and planned by the Kyrgyz Government in response to the food and fuel price rise**

The Government of the Kyrgyz Republic has announced, and partially taken, a number of measures to address the first and second risks (price rise, energy deficit). Some of the measures already implemented include:

- release of 4,500 tons of wheat flour from the State Fund of Material Reserve;
- introduction, in July 2008, of a 100% export tax on wheat, wheat flour, vegetable oil and sunflower seeds, effectively blocking export of home-produced goods and the re-export of imported goods;
- decrease of the Value Added Tax (VAT) on producers, importers and sellers of grain, flour and bakery products and vegetable oil;
- simplification of customs procedures for small importers of grain or flour (less than 20 tons);
- increase of minimum salary level (currently US\$103/month) to 100% of the cost of the minimum food basket;
- increase of pensions up to 43% of the cost of the minimum food basket (400 KGS, ~US\$11);
- increase of the insurance amount of pension by 10%;
- increase of Monthly Social Benefits (MSB) by 100-300 KGS (~US\$2.7-8.2)
- issuance of a decree in June 2008 to establish a special account for accumulation of funds and targeted maintenance of the welfare of vulnerable groups, with the view to compensate for soaring food prices.

In addition, other measures have been planned but their implementation is yet to be confirmed such as:

- purchase of 50,000 tons of wheat from domestic producers to build up the State Wheat Reserves, in order to minimize the risk of food shortages (threat of export restrictions on wheat from Russia and





Kazakhstan); the stock will cover 3 months of consumption of 300,000 families (1.3 million persons)<sup>13</sup>;

- establishment of a 90-day food stock for 8 key commodities;
- provision of all pensioners with monthly compensatory payments on a sliding scale depending on the amount of the pension, with a maximum top-up of 132 KGS (~US\$3.6) with a pension under 200 KGS (~US\$5.5), with the view to compensate for soaring electricity and heating prices.

The World Bank has earmarked US\$10 million for Kyrgyzstan under its Global Food Crisis Response Programme (including US\$4 million for social sectors and US\$4 million for agriculture). In May 2008, the World Bank revised a project (“Additional Financing for the Health and Social Protection Project”) to support the Ministry of Labour and Social Protection in the context of high food prices. Two key interventions of the project are:

- a health component to reduce nutritional vulnerability of at-risk pregnant women and infants/young children, through the provision of nutritional supplements and nutrition education;
- a temporary scale-up of targeted cash transfers under the government’s Unified Monthly Benefit (UMB) programme, during 10 months (October 2008-July 2009).
- 
- The World Bank project will support the scaling up and strengthening of the UMB by:
- financing a topping up of unit benefits for 10 months spanning the 2008-09 winter (October 2008-July 2009), by US\$1/beneficiary/month on top of the US\$3.5/month; this amount closely corresponds with the 30% loss of purchasing power due to food price rises since 2005;
- technical assistance, including monitoring and evaluation of UMB.
- 
- The European Commission will take over the World Bank’s assistance up to the end of 2009. The EC project, for a budget of 5 million Euros, should also increase the MSB by US\$1 per beneficiary per month, and include piloting the new criteria for the State’s benefits’ assignments in several regions.
- 
- Unfortunately, it is not possible at this stage to evaluate the extent to which the WB and EC projects will benefit the population in Bishkek (and other town) peripheries.

### **6.5 How the situation may evolve in the next 6-12 months?**

A quite detailed review of the macro-economic perspectives has been done in the report produced on the food security re-analysis of the Kyrgyz Integrated Household Survey<sup>14</sup>. With regard to Bishkek periphery, a best case and a most likely scenario can be envisaged.

#### **6.5.1 Best case scenario**

- The Government takes the necessary measures to limit electricity cuts not only for essential health services but also for schools and areas of concentration of poverty (including some neighbourhoods of the periphery of Bishkek identified as most vulnerable on the basis of the 2007 World Bank study and other sources of information).
- Food prices do not increase while pensions and benefits are adjusted for the poorest already enrolled in the Government social programme and coverage is expanded to excluded groups such as those lacking proper registration documents.

#### **6.5.2 Most likely scenario**

- While efforts are made to minimize electricity cuts, health services, schools and residential areas in already deprived neighbourhoods such as the periphery of Bishkek, are badly affected during the winter.
- Households intensify their coping strategies by further limiting the consumption of expensive, nutritionally-dense food items, health and heating expenditures, thus increasing the risks of infectious diseases and acute and chronic malnutrition in children in particular.

<sup>13</sup> The Government plans to pay 17 KGS/kg (US\$0.47/kg). This price may not offer farmers enough encouragement to enable the government to meet its target. It is an increase of over 50% on the 2007 purchase price (11 KGS/kg) but average world wheat prices in the first half of 2008 were over 90% higher year-on-year. Furthermore, it seems that in late June, private sector food-processors were paying a farm-gate price of around 18-20 KGS/kg (Kyrgyzstan Country Report, August 2008 - The Economist Intelligence Unit)

<sup>14</sup> Food Security Assessment in the Kyrgyz Republic. A food security analysis of the Kyrgyz Integrated Household Survey 2006, 2007 and 1<sup>st</sup> quarter of 2008 – World Food Programme, November 2008



- They also intensify their search for additional income-earning activities. In women-headed households in particular, this decreases the time left for young children care, including feeding and health practices.
- Indebtedness increases as households cannot meet their food and basic non-food requirements.
- Traders are discouraged to supply local markets with food that households buy in much smaller quantities than before, including nutritious food such as meat and dairy products.
- Children are missing school due to lack of heating, lack of proper clothing and shoes for cold temperatures, and need to support the family with water and wood or other fuel collection.
- Migration to Kazakhstan and Russia increases but remittances are not sent immediately, thus increasing the food and economic struggles of the household members left behind, especially in women-headed households.

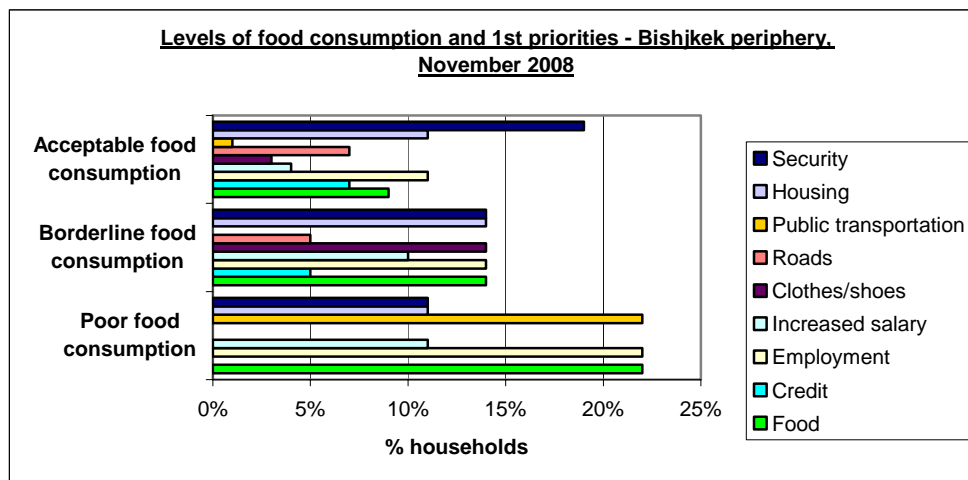
## VII - RESPONSE OPTIONS AND RECOMMENDATIONS

### 7.1 Households' own priorities

Among the 105 households interviewed, priorities were varied, reflecting the diversity of households' conditions, capacities and resilience. In line with the structural difficulties identified above, most priorities reflected 'longer term' requirements rather than acute relief needs, even though 11% of the households indicated 'food' as their first priority. This seems to indicate that the increased food and fuel prices and power shortages experienced during the previous 12-18 months have not yet dramatically affected the food security and economic situation of residents in the periphery of Bishkek. A similar conclusion was reached after the re-analysis of the nation-wide Kyrgyz Integrated Household Survey.

The most frequently mentioned 1st priorities were security in the neighbourhood (17%), employment (12%), food (11%) and repairs/construction of house (11%). Less than 10% of households mentioned better salaries/income, credit, roads or clothing and less than 5% education or health services, or public transportation. As expected, households with poor or borderline food consumption were more likely to indicate food, employment and better salaries as their 1st priority. Households with acceptable food consumption were more likely to require better security.

Figure 31: Levels of food consumption and 1<sup>st</sup> priorities

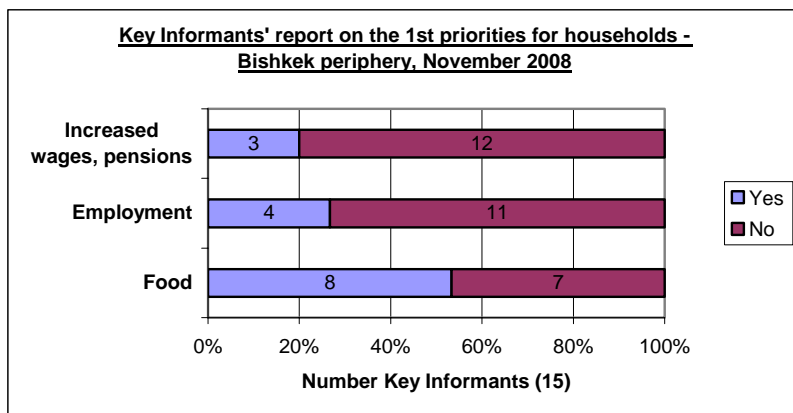


Security and employment were also frequently mentioned as 2<sup>nd</sup> priorities, but **public transportation** also stood out for more than 10% of the households.

Slightly more than half of the 15 Key Informants identified food among the 1<sup>st</sup> priorities for households. Employment was often mentioned among the 2<sup>nd</sup> priorities.



Figure 26: Key informants' report on 1<sup>st</sup> priorities for household



Focus Group discussions mostly confirmed the above priorities, particularly employment, credit (at low interest), road repairs, and low-cost food, including through special shops. Electricity, water and irrigation, and kindergartens were also mentioned.

## 7.2 Target beneficiaries and type of assistance for immediate interventions

### 7.2.1 Target beneficiaries

A small group of vulnerable individuals, including young children, pregnant and lactating women and the chronically sick living in poor households, should receive immediate (relief) food assistance to restore an adequate diet and prevent an increase of acute malnutrition.

Slightly more than a quarter of the population in the periphery of Bishkek could be assumed to be vulnerable for physiological and health reasons<sup>15</sup>. The caseload in a population of 125,000 persons in the periphery of Bishkek, assuming full coverage, would thus be 32,500 persons. However, the assistance may concentrate on the most densely populated neighbourhoods and/or on neighbourhoods known for hosting households more likely to face difficulties, such as the ones where most of the new arrivals settle down or the ones worse served by water, health and other such facilities. This would enable to reduce the caseload.

### 7.2.2 Type of assistance

Special food enriched in micronutrients (such as blended food) accompanied by a household food ration or voucher for food could be provided to the target beneficiaries

The composition of the supplementary food ration needs to be worked out according to the levels of malnutrition. Tentatively, it could provide between 700 and 1,300 kcal in the form of corn-soya blend, sugar and oil.

The composition and size of the household food ration or voucher depends on the main objective of this transfer:

- If the main aim is to protect food consumption and nutrition at household level, nutritionally-valuable food items whose consumption has decreased due to the higher prices - such as meat and dairy products and fruits and vegetables - should rather be provided. However, while these items can be included in a voucher, they are impractical to distribute as part of an in-kind ration. A household voucher could include the equivalent of 600-700 kcal per capita per day in the form of animal and fresh products. The rest of the kilocalories (about 70% of standard requirements per capita) would be provided by cereals, oil and sugar purchased by the households themselves.
- Alternatively, the ration could focus on economic support to the households by providing the most frequently purchased food items. Staple cereals and oil could be provided in-kind or through

<sup>15</sup> This rough estimate is based on the following assumptions: 12% under-5 children x 5% acutely malnourished based on the malnutrition rates estimated in Bishkek city, and 25% of pregnant or lactating women in the population based on data collected in the rapid assessment



vouchers, so that households can save resources for vitamin- and mineral-rich food. However, there is less guarantee that the latter food items will be purchased. To minimize the risk, some non-food support could also be included. Bread vouchers could also be envisaged, with wheat flour provided for free or at subsidized prices to bakers. The household ration or voucher could provide a combination of cereal/bread and oil bringing about 600-700 kilocalories per capita per day (about 1/3rd of standard requirements per capita). The non-food component would represent about 25% of the food market value, i.e. 20% of the total value of the voucher.

### **7.2.3 Modalities of provision of the assistance**

A rapid nutritional survey among under-5 children living in the periphery areas would be important to determine the current level of acute malnutrition and caseload. Targeting on the basis of nutritional status and/or physiological and health status (acutely malnourished under-3 year old children, pregnant or lactating women, chronically sick individuals) may be the most feasible given that selection criteria based on poverty are likely to be difficult to define and verify.

The assistance should cover the sensitive period of the winter, i.e. from December 2008 to April 2009.

### **7.3 Livelihood support response options**

Food insecure households in Bishkek periphery, including those not covered by relief, short-term assistance, would need interventions that address the structural, chronic causes of food insecurity. Some of these interventions could be launched quickly and combined with cash or food assistance to provide a rapid income transfer at the same time.

Cash or vouchers would be preferred in order to encourage traders to continue supplying local markets. A feasibility study would be required to ascertain the relevance of cash-/voucher-for-work programmes to repair roads and establish some infrastructures. The study should also estimate risks and solutions to address issues of maintenance, payment of fees (e.g. for water), staffing and supplies (e.g. if health centres or schools are built or upgraded). The main advantages of these interventions are their self-targeting character and alleviation of pressure on the labour market and unemployment. Disadvantages include time to set the programmes up, requirements for material resources and technical support, and often low number of beneficiaries and time of participation in the programmes due to limited cash resources, and risks of exclusion of needy households who have insufficient manpower (e.g. women-headed) or physical capacity to participate.

Cash/voucher-for-training programmes could also be envisaged to align the skills of young adults in particular to the demands of the labour market. This would require a rapid analysis of the sectors where job opportunities exist. Targeting is likely to be an issue as it would not be possible to enroll all the unemployed people. Specific attention would also need to be paid to gender issues so that girls and women as well as boys and men are included.

Support to get registered and enrolled into government social benefits programmes would also be valuable, particularly for the recently arrived households in the periphery areas. This could take the form of visits by outreach social assistance workers and set up of decentralized locations where such households could easily go. Collaboration with the World Bank- and Economic Community-funded projects for the UMB programme should be sought.

School feeding interventions are likely to encourage the enrolment and attendance of children at school provided there are no other structural constraints such as the lack of heating or teachers. Some organizations have experience with school feeding and could be approached for expanding their interventions in poor and/or most populated neighbourhoods of the periphery.



## 7.4 Monitoring and further assessments

### 7.4.1 Monitoring of the food security situation in urban peripheries

To ascertain whether the most likely scenario is indeed unfolding, some key data and indicators should be monitored, as described in the table below.

**Table 8: Food security monitoring system for the periphery areas of towns**

Main data/indicator	Complementary information	Sources	Frequency
Temperatures	<ul style="list-style-type: none"> <li>• Effects on human diseases (e.g. flu, other respiratory infections)</li> </ul>	<ul style="list-style-type: none"> <li>• Health agents</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly at town and neighborhood health centres level</li> </ul>
Water supply: frequency of shortages, duration	<ul style="list-style-type: none"> <li>• Effects on domestic usage (sources of drinking water)</li> <li>• Effects on human diseases (e.g. water-borne diseases such as diarrhoea, typhus)</li> </ul>	<ul style="list-style-type: none"> <li>• Households</li> <li>• Health agents</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly at neighbourhood health centres level</li> <li>• Each 2 months at household level</li> </ul>
Electricity supply: frequency of cuts, duration	<ul style="list-style-type: none"> <li>• Effects on attendance to school (e.g. lack heating)</li> <li>• Effects on human diseases (water, heating)</li> </ul>	<ul style="list-style-type: none"> <li>• Neighbourhood leaders</li> <li>• School teachers</li> <li>• Health agents</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly at school and neighbourhood levels</li> <li>• Each 2 months at household level</li> </ul>
Local market prices of wheat, potato, vegetables, beef meat, milk, fuel	<ul style="list-style-type: none"> <li>• Effects on traders' sales (volumes)</li> <li>• Effects on households' purchases and consumption</li> <li>• Effects on households' indebtedness</li> <li>• Effects on child malnutrition rates</li> </ul>	<ul style="list-style-type: none"> <li>• Local traders</li> <li>• Households</li> <li>• Health agents</li> </ul>	<ul style="list-style-type: none"> <li>• Preferably twice a month at market level, or monthly</li> <li>• Monthly at health centre level</li> <li>• Each 2 months at household level</li> </ul>
Out-migration: numbers	<ul style="list-style-type: none"> <li>• Compare to last year</li> <li>• Effects on households' indebtedness</li> <li>• Effects on households' income (remittances received)</li> <li>• Effects on households' assets (sales of livestock)</li> </ul>	<ul style="list-style-type: none"> <li>• Households</li> </ul>	<ul style="list-style-type: none"> <li>• Each 2 months</li> </ul>

### 7.4.2 Further assessments of the food security situation in urban peripheries

The assessment was too rapid to collect sufficient information on child nutritional status, risks of social violence and conflict and the variety of strategies that people employ to increase their income and meet their food and other basic needs in a context of increased food and fuel prices.

Urgent follow-up assessments/studies should be conducted to enable the design and fine-tuning of the proposed interventions:

- to design the proposed relief interventions, a rapid nutritional assessment of under-5 children is needed in the periphery areas of Bishkek and probably Osh, the 2nd main town of the country.
- a feasibility and design study for cash/voucher interventions is needed to accompany a supplementary feeding programme; the same study could look into options for cash/food-for-work programmes.