

Household Food Security Assessment

KYRGYZ REPUBLIC



September 2013



World Food Programme

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Acknowledgements

The team for this Food Security Assessment is grateful to the 2,000 households in urban and rural areas of the Kyrgyz Republic who gave their time to answer enumerators' questions and give information. The staff of the company M-Vector efficiently carried out the field data collection and data entry within a very tight timeframe. They also provided the database, as per the WFP guidance.

From the WFP Country Office in the Kyrgyz Republic, Keigo Obara (Head of Vulnerable Analysis and Mapping Unit) and Aizhan Mamatbekova (Vulnerable Analysis and Mapping Assistant) ensured the preparation, monitored the data collection, compiled the analysis of the data, and prepared the final report, with support from Rachel Aviotti (Reports Officer) and oversight from Michael Huggins (Deputy Country Director).

Abbreviations

EFSA	Emergency Food Security Assessment
FAO	Food and Agriculture Organisation of the United Nations
FCS	Food Consumption Score
GDP	Gross Domestic Product
HFSA	Household Food Security Assessment
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Center
KGS	Kyrgyz Som
KIHS	Kyrgyz Integrated Household Survey
MT	Metric Ton
NSC	National Statistics Committee of the Kyrgyz Republic
RCSI	Reduced Coping Strategy Index
SOFI	State of Food Insecurity
WFP	United Nations World Food Programme

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1. KEY FINDINGS

- Almost 10 percent of households had a 'poor' or 'borderline' food consumption score, which reflects unbalanced starchy based diet in the week preceding the survey. This represents a significant improvement compared to the same month last year, when 18.6 had poor or borderline food consumption (Figure 4) as households benefitted from a better harvest in 2013 and lower food prices than a year earlier. .
- However, some 16 percent of the lowest quintile of the population (in terms of expenditure) demonstrated poor food consumption, compared with the average of 10 percent (Figure 12). The poorer the household the less likely it was to have a diverse food basket.
- 28 percent of households had a per capita cash income below the poverty line in September 2013, and their monthly expenditure was below the national poverty line among 12 percent of households (Figure 8 and Figure 9).
- When the three food consumption groups (see page 2 'Calculating the food consumption score') and three income level groups (see page 2 and 3 'Measuring economic access to food') were combined, an estimated 14 percent of households were found to be food insecure in September 2013 (Figure 10). This is a significant improvement compared to March 2013 (24 percent) and September 2012 (25 percent).
- Households who relied on irregular cash income from unskilled labour accounted for the highest proportion of almost all food insecurity indicators (Figure 13). 30 percent of unskilled wage labourers had to spend more than 70 percent of their budget on food, indicating a high dependency on food purchases and leaving them vulnerable to market developments, such as the recent price hikes and loss of income opportunities. They had the highest proportion in the lowest expenditure quintile (30 percent), and 21 percent of them had a poor or borderline food consumption score. Irregular and low income and high food prices did not enable them to maintain an adequate frequency and diversity of food intake.
- 30 percent of unskilled wage labourers had to spend more than 70 percent of their budget on food, indicating a high dependency on food purchases and leaving them vulnerable to market developments, such as the recent price hikes and loss of income opportunities. They had the highest proportion in the lowest expenditure quintile (30 percent), and 21 percent of them had a poor or borderline food consumption score .
- Those who relied on pensions or social allowances as a primary income source also had a high proportion of food security indicators, demonstrating that inadequate levels of benefit did not enable them to maintain an adequate frequency and diversity of food intake.
- Food insecurity was more of a rural phenomenon. 15 percent of rural households were food insecure when the food consumption groups and income-based food access groups were combined, while 12 percent of urban households were food insecure. Most indicators suggest greater food insecurity in Jalalabad, Chuy, Batken and Naryn provinces. Households in Jalalabad province were more likely to have poor food consumption (24 percent versus the 10 percent national average), which suggests they had a limited and monotonous diet.

2. BACKGROUND OF THE HOUSEHOLD FOOD SECURITY ASSESSMENT

Objectives of the Household Food Security Assessment (HFSA)

The overall objective of the HFSA is to provide timely information on the household level food security and vulnerability to food insecurity in the Kyrgyz Republic by:

- Analysing the level of household food security at national and disaggregated levels, using multiple indicators (see Annex 1. *'The suite of food security indicators'* suggested by FAO/WFP/IFAD 2013)
- Evaluating the change in household food security by comparing the trends with previous HFSA's conducted using the same indicators
- Evaluating potential causal relationships between factors that determine food security

How to measure food security and nutrition

Food security exists when all people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (World Food Summit, 1996). Based on this definition, four food security dimensions can be identified: food availability, economic and physical access to food, food utilization, and stability (vulnerability and shocks) over time. Each food security dimension is expressed through specific indicators. No single indicator is able to capture the complexity and multidimensionality of food security (State of Food Insecurity (SOFI) 2013, FAO/WFP/IFAD). **Annex 1** provides an overview of the suite of indicators and their organization into the four dimensions of food security.

In the HFSA, household food security was assessed by:

Measuring the quality/ diversity of food that its members consume: Households consuming a non-diversified, unbalanced and unhealthy diet can be classified as food insecure. Food insecure people spend a larger share, if not all, of their food budget on cereals and tubers, such as wheat and potatoes, which provide low cost and accessible sources of calories. They tend to consume fewer nutrient dense foods that provide a good source of protein and micronutrients. Therefore, the less varied the food intake by members of a household, the more likely they are to be food insecure. In the HFSA, dietary diversity was captured by Food Consumption Score (FCS) which measures the number of food groups that a household consumes over a reference period of seven days.

Calculating the FCS: FCS combines food diversity and food frequency (the number of days each food group is consumed), weighted by the relative nutritional importance of different food groups. Cereals, tubers and root crops are assigned a weighting of 2; pulses a weighting of 3; vegetables, relish and fruit 1; meat, eggs, fish and dairy 4; sugar, oils, fats and butter 0.5. The food consumption score uses standardised thresholds that subsequently divide households into three groups: poor food consumption, borderline food consumption and acceptable food consumption.

For more details on the FCS, see below guidelines and researches:

- World Bank, 2013, *'Shorter, Cheaper, Quicker, Better: Linking Measures of Household Food Security to Nutritional Outcomes in Bangladesh, Nepal, Pakistan, Uganda, and Tanzania'*
- WFP, 2009, *'Technical Guidance Sheet - Food Consumption Analysis: Calculation and Use of the Food Consumption Score in Food Security Analysis'*
- International Food Policy Research Institute (IFPRI), 2008, *'Validation of the world food programme's food consumption score and alternative indicators of household food security'*

Measuring economic access to food: Three food access groups ('poor', 'average' or 'good') were created using monthly per capita income. Considering the potential underestimation of monthly income due to unreported income from informal sources, such as remittances from returned labour migrants and sale of surplus harvest, economic food access levels are also grouped using monthly expenditure. The official extreme poverty line and the poverty line were used for the grouping thresholds:

Food Access Groups based on:

- Monthly per capita expenditure
- Monthly per capita income

Poor: Less than 1,340 KGS per capita per month (extreme poverty line in 2013).	Average: Between 1,340 and 2,154 KGS per month (poverty line in 2013)	Good: More than 2,154 KGS per capita per month.
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Combining household food consumption and food access levels: The three food security groups were obtained by cross-tabulating the three groups of food consumption with the three groups of food access groups (see below):

		Food Consumption		
		Poor	Borderline	Acceptable
Food Access	Poor food access group (income less than 1,340 KGS)	Severely food insecure	Severely food insecure	Moderately food insecure
	Average food access group (income between 1,340 and 2,154 KGS)	Severely food insecure	Moderately food insecure	Food secure
	Good food access group (income more than 2,154 KGS)	Moderately food insecure	Food secure	Food secure

Measuring the level of stress caused by various shocks by Reduced Coping Strategy Index (RCSI): Households use coping strategies to mitigate the impact of food security related shocks such as food availability shortfalls, high food prices or loss of income opportunities. The frequency and type of coping strategies indicate the level of stress caused by various shocks. The Reduced Coping Strategy (RCSI) index is computed by counting the number of times the following strategies had been employed during the seven days preceding the survey.

- Rely on less preferred and less expensive food;
- Borrow food, or rely on help from a friend or relative;
- Limit portion size at meal times;
- Restrict consumption by adults in order for small children to eat;
- Reduce number of meals eaten in a day.

The index captures typical coping strategies related to food that households employ when they face difficulties in meeting their food consumption requirements. The higher the R-CSI, the more frequently households had to use the strategies in an attempt to resolve their difficulties, thus reflecting greater hardship for these households.

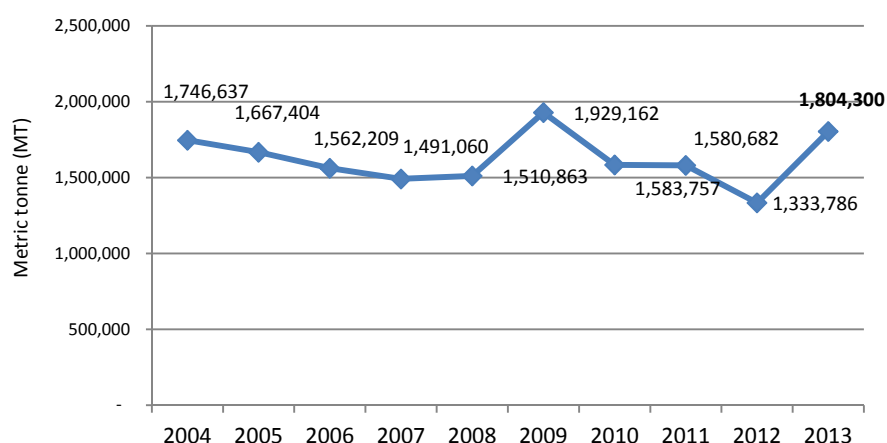
For more details on the RCSI, see Maxwell, D. & Caldwell, R. 2008. The Coping Strategies Index: Field Methods Manual. CARE/WFP/TANGO/ Tufts University.

3. CONTEXT IN SEPTEMBER 2013

Positive growth in crop production

The Ministry of Finance expects gross domestic product (GDP) growth to reach 5.5 percent in the Kyrgyz Republic in 2013, due to the growth of trade, transport and communications services. GDP contracted by 0.9 percent in 2012, mainly due to reduced production from the largest gold mine in the country.

The aggregate cereal output has been estimated at 1.8 million tonnes this year, about 35 percent higher than in 2012 (**Figure 1**). The main wheat crop was estimated to be 897,100 MT this year, compared to 570,000 MT last year.

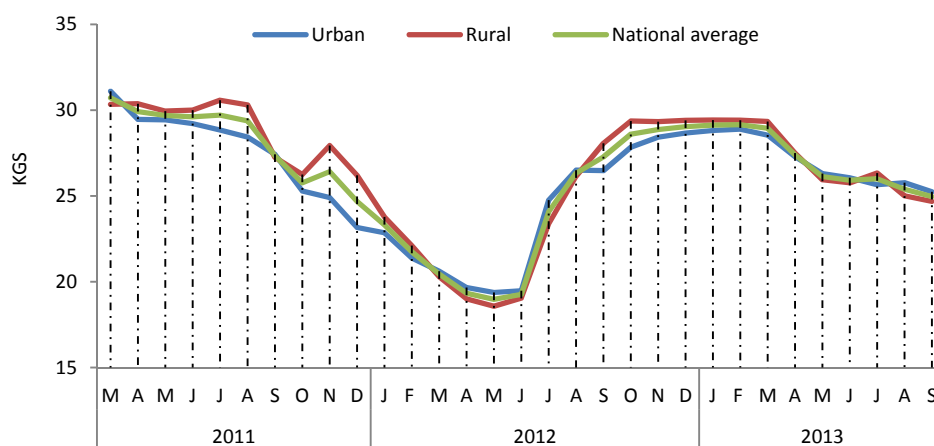
Figure 1. Aggregate cereal production from 2002 to 2012

Source: National Statistics Committee (NSC)

Food prices have stabilised

In terms of caloric contribution, wheat is the most important item for food consumption in the Kyrgyz Republic, providing 38 percent of energy requirements. The high price impacts household food consumption, which in turn impacts health and nutrition. The retail price of wheat flour sharply increased during the latter half of 2012; the price increased by 56 percent in rural and 45 percent in urban areas between June and December 2012, mainly due to higher export prices in Kazakhstan and reduced domestic wheat output during the year.

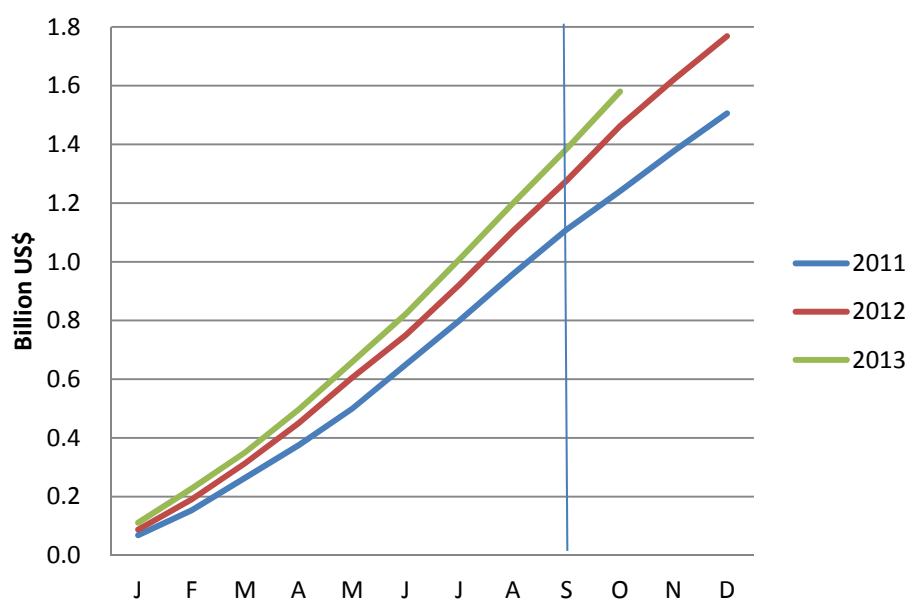
Reflecting stabilised export prices and increased domestic harvest, the retail price of wheat flour started to decrease in mid-2013. The price in September 2013 was 14 percent lower than in January the same year and 8 percent lower than the same month in 2012. The price was 19 percent lower than the record high reached in March 2011 (**Figure 2**)

Figure 2. Retail prices of wheat flour (Kyrgyz Som (KGS) /kg)

Source: Monthly Update on Food Security and Price in Rural and Urban Area, Issue 17 (WFP, 2013)¹

Positive growth in incoming remittances

As **Figure 3** shows, the volume of incoming remittances increased in 2013, and reached US\$1.48 billion as of September 2013, representing increases of 27% and 8% compared to the same period of 2011 and 2012 respectively. The increase was recorded in all provinces. Remittances from Russia made up nearly 90% of the total inflow.

Figure 3. Aggregate volume of incoming remittances (2011, 2012 and 2013)

Source: National Bank of the Kyrgyz Republic, elaborated by WFP

4. OVERVIEW OF HOUSEHOLD FOOD SECURITY IN SEPTEMBER 2013

As **Figure 4** shows, almost 10 percent of households had 'poor' or 'borderline' food consumption (3.2 percent poor and 6.6 percent borderline) in the September HFSA, which represents a slight deterioration from 9 percent in March 2013 (2.6 percent poor and 6.1 percent borderline). However, this marked a significant improvement compared to the same period last year, when 6.2 percent had poor food consumption and 12.4 percent borderline. As explained above, this measurement combines food diversity, food frequency (the number of days each food group is consumed) and the relative

¹ Monthly updates are available at : <http://www.wfp.org/countries/kyrgyzstan/publications/market-analysis>

nutritional importance of different food groups. The 3.2 percent of households with poor food consumption were likely to face energy deficiency and have an extremely unbalanced diet comprised of starchy wheat or potatoes with some vegetables.

Those living in rural areas were more likely to have poor or borderline food consumption than those in urban locations (12 percent as opposed to 6 percent). Issyk-Kul and Bishkek had better food consumption than elsewhere, with fewer than 4 percent of households having poor or borderline food consumption (Figure 5).

Figure 4: Percentage of households with poor and borderline food consumption (2010-2013, national average)

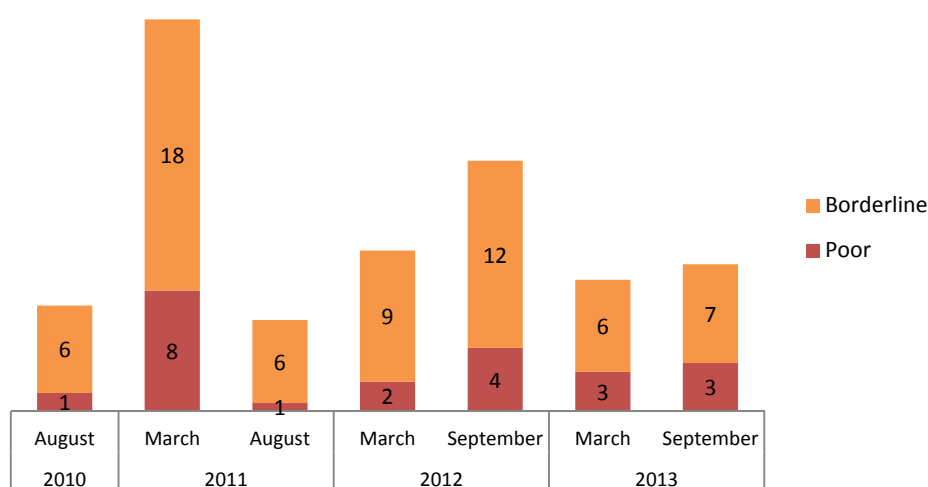
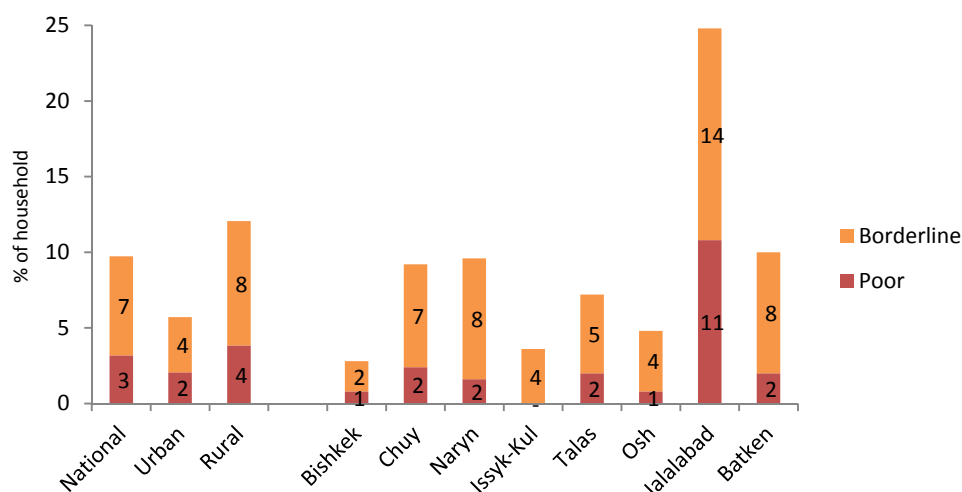


Figure 5: Percentage of households with poor and borderline food consumption (September 2013, by province)



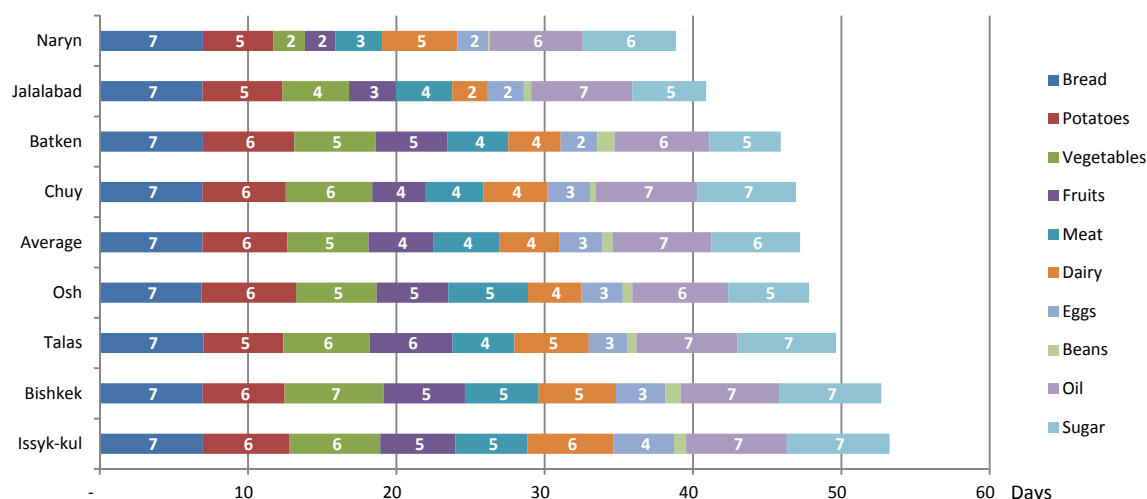
Source: HFSA September 2013

Wheat was the most important staple in terms of caloric intake, followed by dairy and potatoes. In September 2013, people consumed cereals, cooking oil and sugar almost every day, potatoes and vegetables six days a week, and fruit and meat four times a week.

However, low dietary diversity remained a key problem in some areas. Vegetables and fruit were less frequently consumed in Naryn (**Figure 6**). Beans and pulses were consumed less than one day a week in all provinces except Bishkek and Batken.

Households in Bishkek, Issyk-Kul and Naryn consumed considerably more dairy products. Sugar was consumed every day in northern provinces (Bishkek, Chuy, Talas, Issyk-Kul), but less frequently in southern provinces (Osh, Jalalabad, Batken).

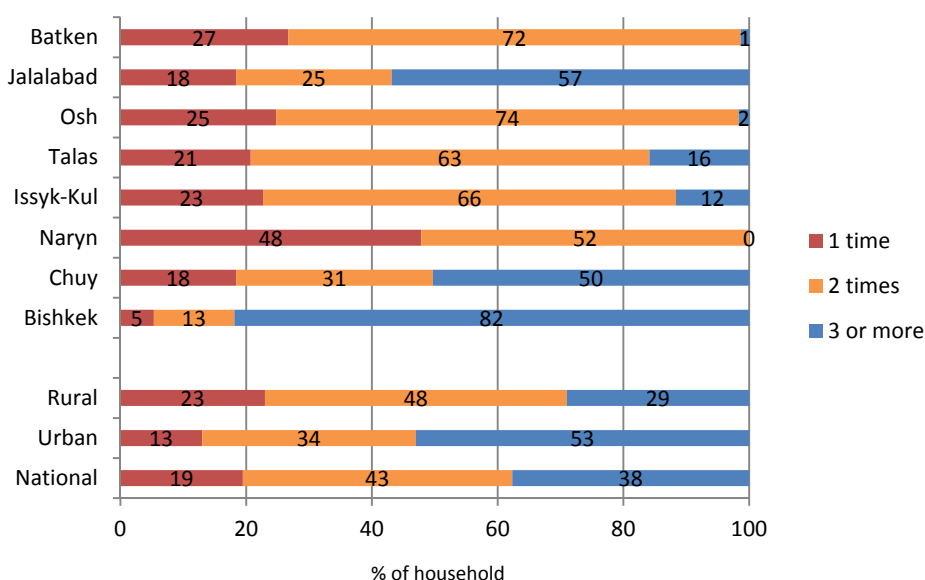
Figure 6: Average number of days food groups consumed in the previous week



Source: HFSA September 2013

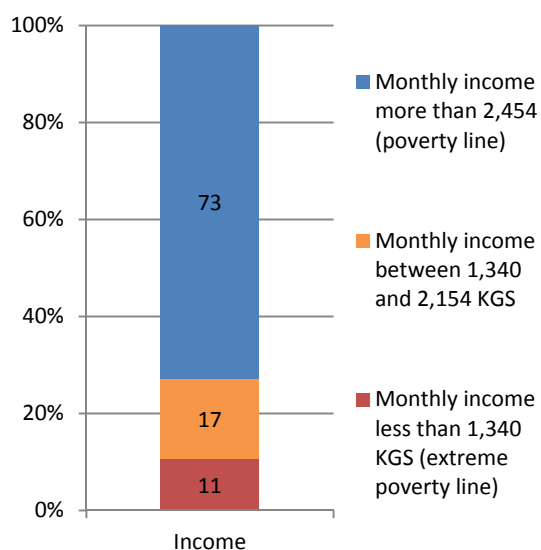
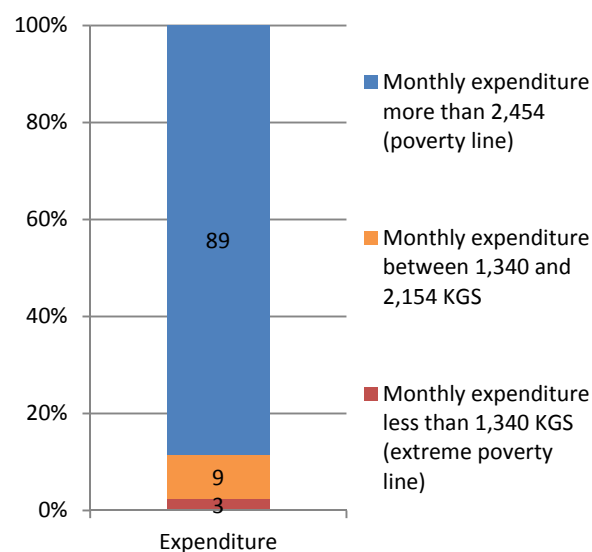
As **Figure 7** shows, some 19 percent of the households had only one meal a day. While 82 percent of Bishkek households consumed three meals a day, only 29 percent of rural households had three meals daily.

Figure 7: Percentage of households consuming one, two and three meals a day by region (%)



Source: HFSA September 2013

As **Figure 8 and 9** show, 28 percent of households obtained a cash income that per capita was below the poverty line while 12 percent of households had a monthly expenditure below the national poverty line.

Figure 8: Percentage of households with monthly income below poverty line (%)**Figure 9: Percentage of households with monthly expenditure below poverty line (%)**

Source: HFSA September 2013

When the three food consumption groups and three income level groups were combined, an estimated 14 percent of households were found to be food insecure during the assessment in September 2013 (**Figure 10**). This was a significant improvement compared to March 2013 (24 percent) and September 2012 (25 percent).

Figure 10: Proportion of households with severely food insecure, moderately food insecure and food secure households based on food consumption score and income-based food access level

		Food Consumption		
		Poor	Borderline	Acceptable
Food Access	Poor food access group (income less than 1,340 KGS)	0.8%	1.7%	8.3%
	Average food access group (income between 1,340 and 2,154)	0.4%	1.4%	14.8%
	Good food access group (income more than 2,154)	1.5%	3.4%	67.8%

3 %	= Severely food insecure
11 %	= Moderately food insecure
86 %	= Food secure

Considering potential underestimation of monthly income due to unreported income from informal sources, such as remittances from returned labour migrants and sale of surplus harvest, the economic food access level was also grouped using expenditure. Based on the composition of the three food consumption groups and expenditure-based economic food access levels, an estimated 7 percent of households were found to be food insecure during the assessment in September 2013 (**Figure 11**). This also showed improvement when compared to March 2013 (21 percent, expenditure-base) and September 2012 (13 percent, expenditure-base).

Figure 11: Proportion of households with severely food insecure, moderately food insecure and food secure households based on food consumption score and income-based food access level

		Food Consumption		
		Poor	Borderline	Acceptable
Food Access	Poor food access group (income less than 1,340 KGS)	0.1%	0.9%	2.2%
	Average food access group (income between 1,340 and 2,154)	0.2%	1.2%	5.1%
	Good food access group (income more than 2,154)	2.2%	6.9%	81.2%

1 %	= Severely food insecure
6 %	= Moderately food insecure
93 %	= Food secure

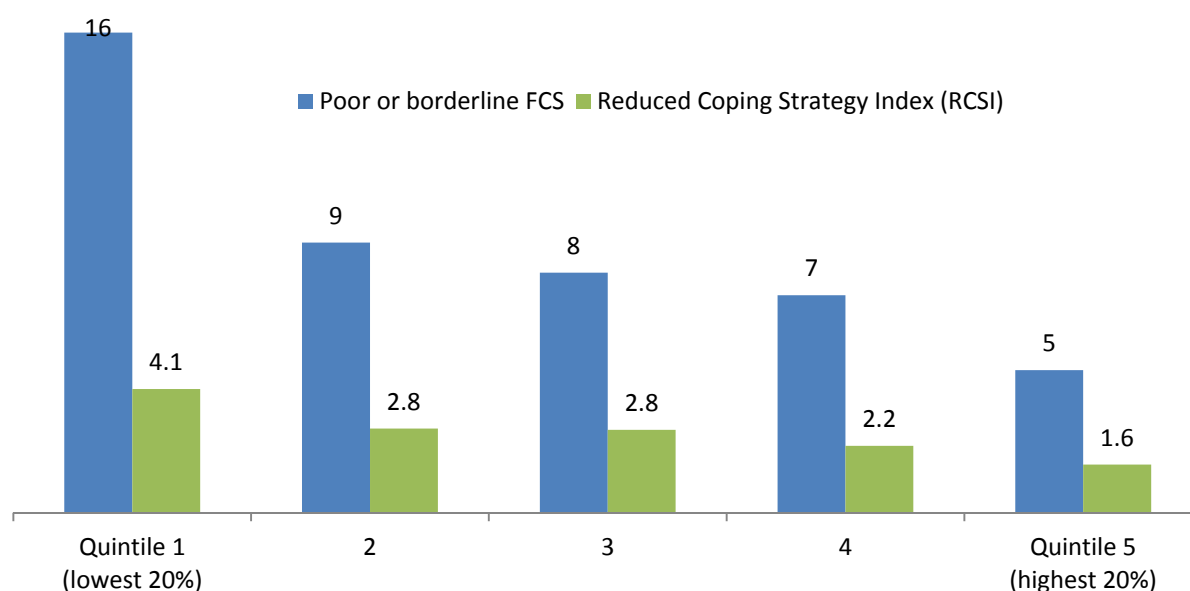
Please refer to Section 6 'Where are the food insecure?' for more detailed analyses on provincial disparities.

5. WHO ARE THE FOOD INSECURE?

The poor

The poorer the household, the more likely it was to have poor or borderline food consumption and high RCSI. Some 16 percent of the lowest quintile of the population (in terms of expenditure) had a poor food consumption score, compared with a 10 percent average. The poorer the household the less likely it was to have a diverse food basket.

Figure 12: Food security indicators by expenditure quintile



Source: HFSA September 2013

Poverty was often the root cause of food insecurity because poor households lack the resources required to access enough nutritious food to live a healthy active life. Poor farmers were unable to invest in the inputs required to boost their own yields. Poor farmers may have to sell any surplus soon after harvest to earn income and repay debts, at once exposing themselves to fluctuating market prices as well as not being able to benefit from selling when prices rise.

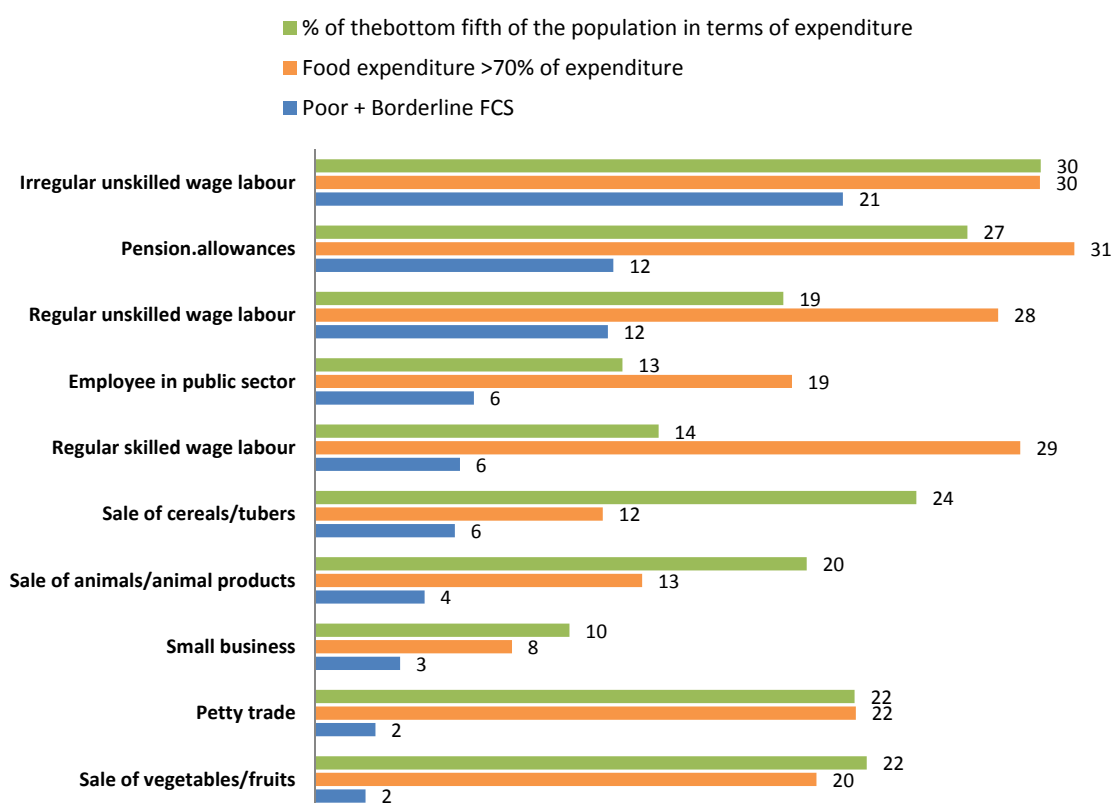
The poor had limited financial assets to cope with shocks, such as high food prices, loss of income opportunities or reduced income due to economic shocks, illness or accident of a household member, loss of assets due to conflict, and harvests/ crop failure due to natural disasters. In times of such stresses households often resort to coping mechanisms that may further impact their food security status, such as reducing food quality or consumption. These coping strategies often perpetuate a cycle of poverty and further undermine already fragile livelihoods and food security.

A direct relationship was observed between poverty and the severity of coping strategy, represented by the Reduced Coping Strategy Index (RCSI, please refer to page 2 for the methodology). The poorer the household, the more frequently the household had to use food-related strategies to respond to their difficulties.

Irregular unskilled labours

Grouping the households into different livelihood groups according to the primary income activity they mainly rely upon revealed that households who relied on irregular cash income from unskilled labour had the highest proportion of almost all food insecurity indicators (**Figure 13**).

Figure 13: Food security indicators by livelihood groups (% of household)



Source: HFSA September 2013

Irregular and low income and high food prices did not enable them to maintain an adequate frequency and diversity of food intake. Moreover, 30 percent of unskilled wage labourers had to spend more than 70 percent of their budget on food, indicating a high dependency on food purchases and leaving them vulnerable to market developments, such as the recent price hikes and loss of income opportunities. They had the highest proportion in the lowest expenditure quintile (30 percent), and 21 percent of them had a poor or borderline food consumption score.

Households reliant on pensions or social allowances

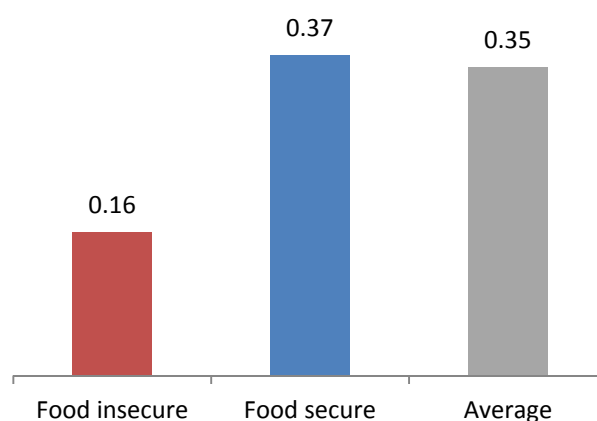
Those who relied on pensions or social allowances as a primary income source also had a higher proportion of poor and borderline food consumption. Of pensioners and those reliant on social

allowances, 31 percent spent more than 70 percent of their budget on food, indicating a high dependency on food purchase and leaving them vulnerable to market developments, such as the recent price hikes. This group had the second highest proportion in the lowest expenditure quintile (27 percent). Twelve percent had a poor or borderline food consumption score. These indicate that inadequate levels of benefit did not enable them to maintain an adequate frequency and diversity of food intake.

Small-scale farmers

Households that were reliant on the sale of cereal crops had the third highest proportion in the lowest expenditure quintile (24 percent) after unskilled wage labourers and those reliant on pension/social allowances. In September 2013, the average acreage cultivated was 0.35 hectare/capita. These sizes were slightly higher than in the same season in 2012 (0.31 hectare/capita) and in 2011 (0.25 hectare). As **Figure 14** shows, the average acreage cultivated per capita was smaller among food insecure households (based on food consumption and income levels). This indicates that households with small plot sizes are more likely to have poor food consumption and low income levels.

Figure 14. Size of cultivated land by food security status (hectares, September 2013)



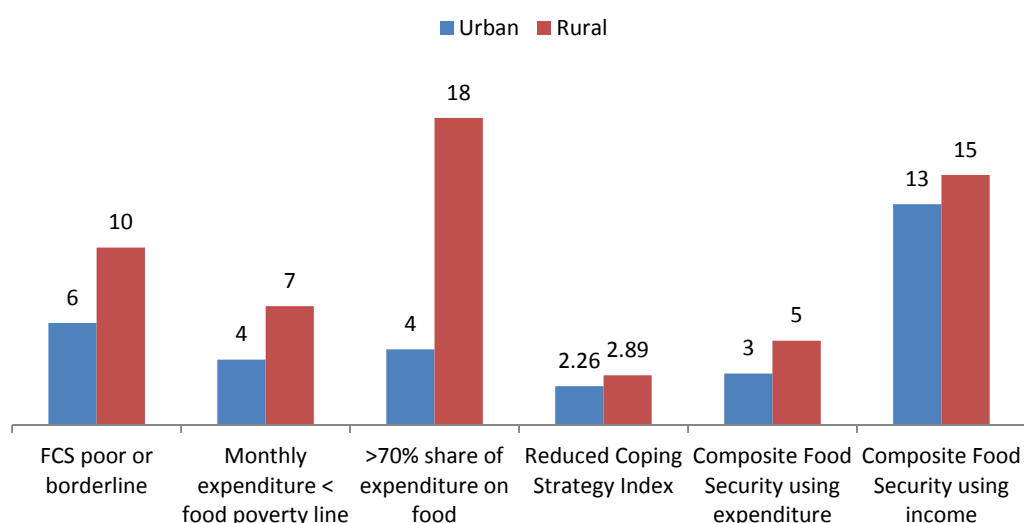
Source: HFSA September 2013

6. WHERE ARE THE FOOD INSECURE?

Rural areas

Figure 15 below summarises household food security status in urban and rural areas using food consumption score, poverty, share of expenditure on food, and severity of coping strategy. The result shows that food insecurity was more of a rural phenomenon across all food security indicators. When the three food consumption groups and three income-based food access groups were combined, 15 percent of rural households were food insecure (4 percent severely and 11 percent moderately food insecure) while 12 percent of urban households were food insecure (1 percent severely and 11 percent moderately).

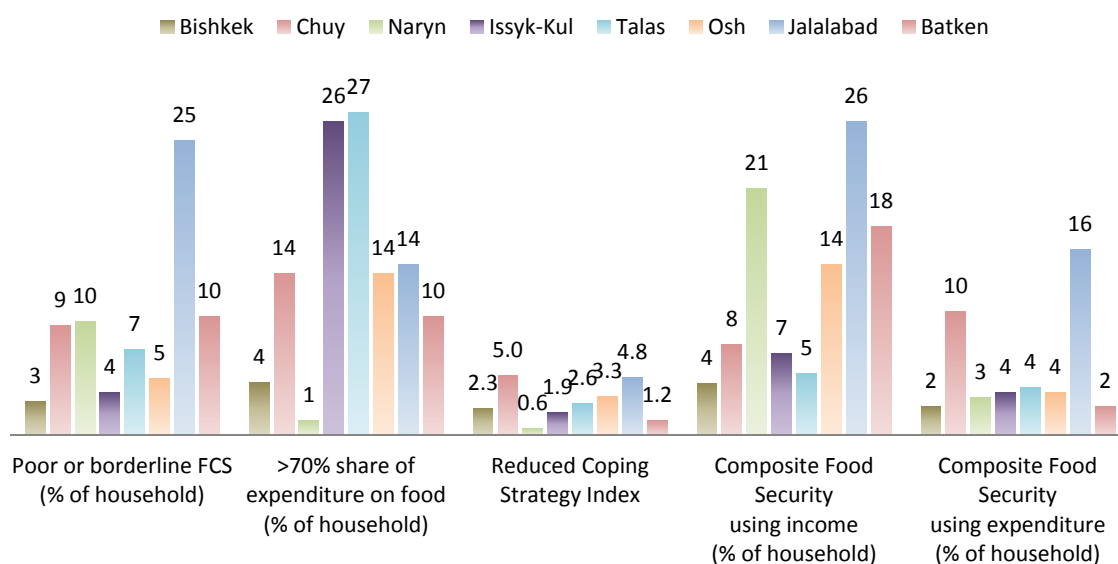
In rural areas, the proportion of food insecure household was significantly lower compared to both March 2013 (31 percent) and September 2012 (35 percent), while there was only a slight change in urban areas (12 percent in March 2013, 9 percent in September 2012).

Figure 15: Food security indicators by urban and rural areas

Source: HFSA September 2013

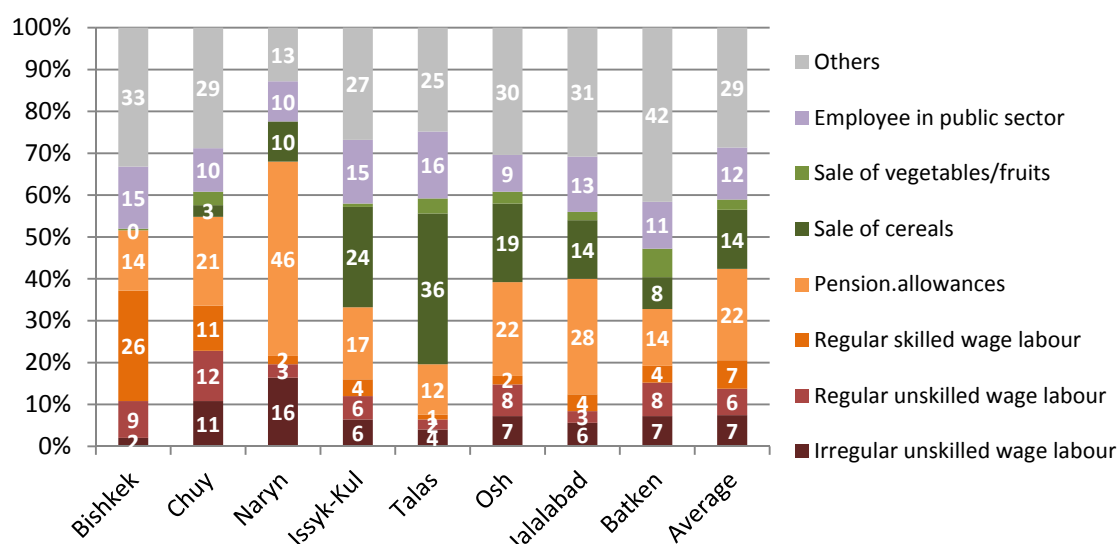
Jalalabad province

As **Figure 16** reveals, the indicators suggest greater food insecurity in Jalalabad, Chuy, Batken and Naryn. Jalalabad province had the highest level for almost all indicators. Households in Jalalabad province were more likely to have poor food consumption (24 percent versus the 10 percent national average), which suggested they had a limited and monotonous diet. Some 28 percent of Jalalabad households were reliant on pensions and social allowances as a primary income source. This was the second highest result after Naryn province.

Figure 16: Food security indicators by province**Chuy province**

As **Figure 17** shows, casual wage labour, the most vulnerable of income sources as discussed above, was the most common in Chuy province. This contributed to the finding that the highest proportion of poor food access groups (expenditure-based) was in Chuy province: 7 percent in comparison to the 3 percent national average.

Figure 17. Proportion of livelihood groups (primary income source) by province (September 2013)



Source: HFSA September 2013

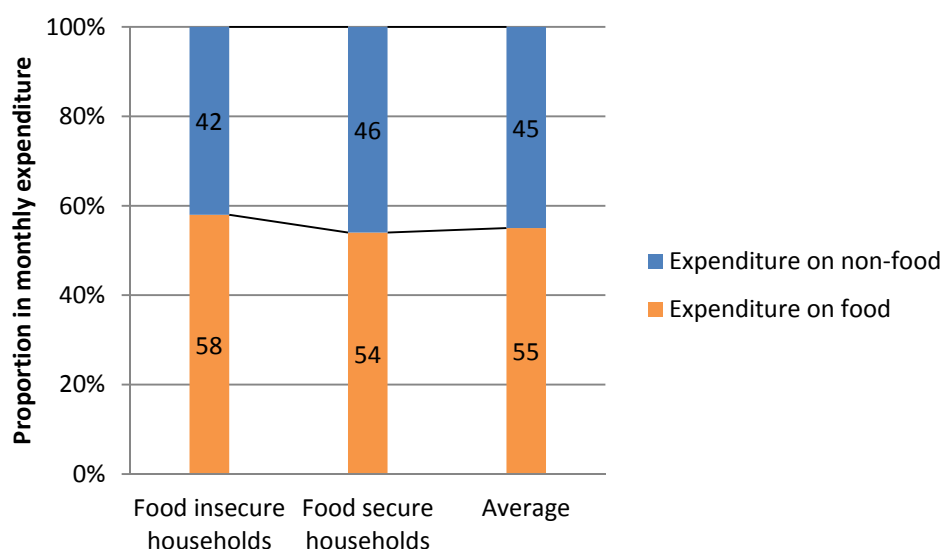
The High Reduced Coping Strategy Index (see page 2 for the methodology) indicated that households in Chuy were most likely to have used food-related coping strategies to deal with the difficulties caused by not having enough food, or money to buy all necessary food. These coping strategies included borrowing food, limiting portion sizes at meals, relying on less preferred and less expensive food, and reducing the number of meals eaten in a day. Food insecure households were more likely to have employed food-related coping strategies and to have done it more frequently. These coping strategies often perpetuated a cycle of poverty and further undermined already fragile livelihoods and food security.

7. OTHER FACTORS THAT DRIVE FOOD INSECURITY

High food prices

Despite increased domestic production and reduced wheat flour prices, high food prices were noted by most households (83 percent) as one of the difficulties faced during the three months preceding the survey, followed by high fuel prices (53 percent). These problems have been frequently noted since September 2012.

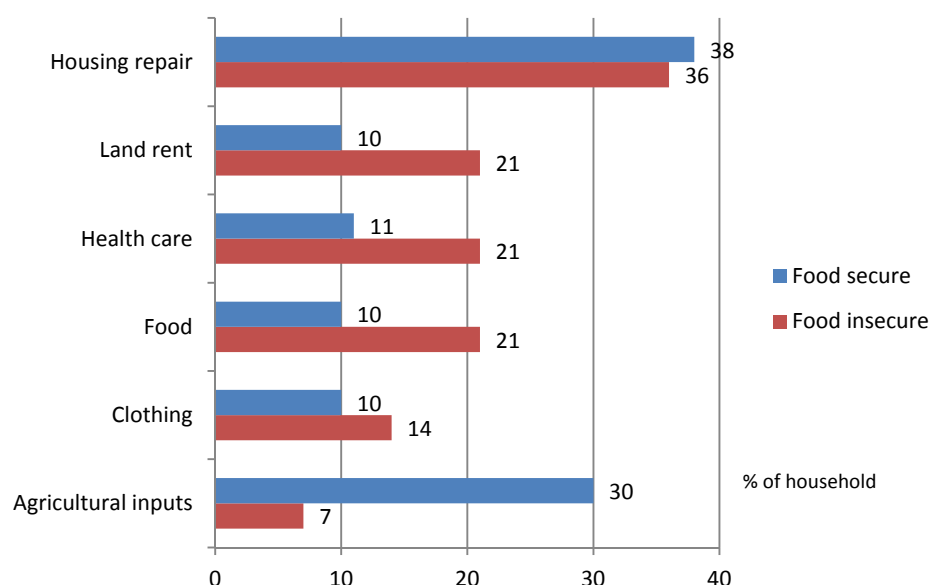
Food insecure households (based on food consumption and income-based food access) spent 58 percent of their budget on food, leaving them dependent on purchasing items that are subject to market fluctuations and increasing their risk of vulnerability should they incur a loss of income. Wheat flour and its products accounted for 18 percent of household budgets (**Figure 18**).

Figure 18. Proportion of food expenditure (September 2013)**Box 1. Measuring household food access by the share of expenditure on food**

Those with high share of expenditure on food are likely to be more vulnerable to food insecurity, because they have less of a buffer when confronted with shocks such as high food prices, or loss of income opportunity or reduced income. In times of such stress, food insecure households often resort to corrosive coping mechanisms such as reducing food quality and quantity, increasing labour migration, etc.

Indebtness

About 23 percent of households had credit or loans to repay. Similarly as in previous HFSAs, both food secure and insecure households had credit or loan repayments, and no statistical difference was observed. However, food insecure households used borrowed money for housing repair (36 percent), buying food (21 percent), clothing (14 percent), health care (21 percent) and rental of land (21 percent), while the food secure used it for housing repair (38 percent) and agricultural inputs, including animal feed and irrigation (30 percent).

Figure 19. Purpose of credit or loan (% of households)

Source: HFSA September 2013

8. CONCLUSION

After a sharp increase in the price of wheat flour in the latter half of 2012, the price gradually decreased during the first six months of 2013, reflecting a stabilised export price in Kazakhstan and increased domestic supply in the Kyrgyz Republic. In September 2013, the price of wheat flour was 8 percent lower than in the same month in 2012, and 19 percent lower than the record high reached in March 2011.

In September 2013, 10 percent of households had a 'poor' or 'borderline' food consumption score. This represented a significant improvement compared to the same month last year, when 18 percent had poor or borderline food consumption, and was primarily a result of better harvests and lower food and fuel prices. However, some 16 percent of the lowest quintile of the population (in terms of expenditure) consumed inadequate diets as measured by the food consumption score. The poorer the household, the less likely it was to have a diverse food basket.

Most households consumed wheat products for seven days and potatoes for six days in the week preceding the survey, but low dietary diversity remained a key problem in some areas. Vegetables and fruit were less frequently consumed in Naryn, and pulses were consumed less than one day a week in most provinces including Talas which is a major producer of beans in the country.

A direct relationship was observed between food security indicators and poverty (see **Figure 10**). The poorer the household, the more likely it was to have low dietary diversity and to use food-related coping strategies. While the poorest expenditure quintile consumed wheat and potatoes as frequently as better off groups did, they consumed protein rich food such as meat and dairy less frequently. This indicated that improved availability of and access to staple food may not have translated into better dietary diversity. This suggested that policy interventions that support dietary diversity would be required, particularly for the poor.

Poor households had to spend a high share of their expenditure on food, and they were likely to be more vulnerable to shocks, such as high food prices, loss of employment, and natural disasters. Households who relied on irregular income from unskilled labour as their primary livelihood source had the lowest income level among the various livelihood groups. In Chuy province, more than 10 percent of people relied on unskilled labour, a significant increase compared to March 2013 most likely due to increased seasonal labour opportunities. This indicates that food insecurity and poverty were related not only to food production, but also the low availability of reliable and stable income opportunities.

Households who were reliant on pensions or social allowances as a primary income source were also more likely to have worse conditions in almost all food security indicators. Nearly a third of them (31 percent) had to spend more than 70 percent of their budget on food, indicating a high dependency on food purchases and vulnerable to market developments. Such households accounted for the second highest proportion in the lowest expenditure quintile (27 percent) after irregular wage labour. These results indicated that inadequate levels of benefit did not enable them to maintain an adequate frequency and diversity of food intake.

The assessment results confirmed that a range of food security indicators should be used in order to capture the multiple dimensions of food security. The national figures do not provide a picture of food security for particular socio-economic groups or geographic areas within a country. The use of broader food security indicators capturing the complexity of food insecurity would allow decision-makers to design and implement more effective policy measures and social safety nets that would better serve the country's vulnerable populations.

ANNEX 1. The suite of food security indicators (SOFI 2013)

FOOD SECURITY INDICATORS	DIMENSION
Average dietary energy supply adequacy Average value of food production Share of dietary energy supply derived from cereals, roots and tubers Average protein supply Average supply of protein of animal origin	AVAILABILITY
Percentage of paved roads over total roads Road density Rail lines density	PHYSICAL ACCESS
Domestic food price index	ECONOMIC ACCESS
Access to improved water sources Access to improved sanitation facilities	UTILIZATION
Cereal import dependency ratio Percentage of arable land equipped for irrigation Value of food imports over total merchandise exports	VULNERABILITY
Political stability and absence of violence/terrorism Domestic food price volatility Per capita food production variability Per capita food supply variability	SHOCKS
Prevalence of undernourishment Share of food expenditure of the poor Depth of the food deficit Prevalence of food inadequacy	ACCESS
Percentage of children under 5 years of age affected by wasting Percentage of children under 5 years of age who are stunted Percentage of children under 5 years of age who are underweight Percentage of adults who are underweight Prevalence of anaemia among pregnant women Prevalence of anaemia among children under 5 years of age Prevalence of vitamin A deficiency (forthcoming) Prevalence of iodine deficiency (forthcoming)	UTILIZATION

ANNEX 2. Survey questionnaire

Code Province : <input style="width: 40px;" type="text"/>	Code Rayon : <input style="width: 40px;" type="text"/>	Code Ayl Okrugs : <input style="width: 40px;" type="text"/>	Name of the location
Questionnaire number: <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/>		Date : <input style="width: 40px;" type="text"/> / <input style="width: 40px;" type="text"/> / <input style="width: 40px;" type="text"/> 2013 day / month	
Name of enumerators : <input style="width: 80%; border-bottom: 1px solid black;" type="text"/>			

Introduction to facilitators:

1. The interview should be done face-to-face and one-on-one basis, not through telephone or in a group setting. Do not administer the interview in a place where someone else can easily overhear the interview.
2. The interview should be administered orally and the questionnaire should be filled by the interviewer, not by the respondents.
3. If the selected household is inaccessible, not found or vacant, inform the supervisor and follow the instruction.
4. If respondents do not understand particular words within the questions, repeat the question and provide further clarification. Interviewers should by all means refrain from suggesting answers to respondents.
5. The interview will take 30-40 minutes. Make arrangements for the respondent to have access to water, tea or smoke during the interview.

Consent:

We are assessing the living situation of families in Kyrgyzstan. As it is not possible to meet everybody, we have selected at random localities and families in order to have an idea of the general situation. None of the localities or families visited will be privileged to receive particular assistance, and we do not register names. However, this information will be used to take decisions on programmes to contribute to improving the living conditions of the population in the country. The interview should not last more than 40 minutes. The answers you will give will remain strictly confidential and will not be given to others. You can refuse to participate or to answer to some of the questions. But we hope that you will accept to participate, as your answers are very important to take the best decisions possible. Do you have questions for us? Can we start?

Ask if several families share the same house without eating together and without sharing their income. If there are distinct families, select one at random for the interview.

I – HOUSEHOLD COMPOSITION

Who is making the decisions for the household?	1= Man/ 2 = Woman	1.1	<input style="width: 40px;" type="text"/>	<input style="width: 40px;" type="text"/>	
How old is he/she?		1.2	<input style="width: 40px;" type="text"/>	years	
How many children and adults live in your family?		1.3	<input style="width: 40px;" type="text"/>		
Children below 5 years		1.4	<input style="width: 40px;" type="text"/>		
Primary school-age children 6-11 years old		1.5	<input style="width: 40px;" type="text"/>		
Secondary school-age children 12-18 years		1.6	<input style="width: 40px;" type="text"/>		
Adult men 19-60 years		1.7	<input style="width: 40px;" type="text"/>		
Adult women 19-60 years		1.8	<input style="width: 40px;" type="text"/>		
Adults above 60 years of age		1.9	<input style="width: 40px;" type="text"/>		
Write total number of persons, or 0 if there are none:					
1.10	Are there persons who have long-duration sickness (e.g. diabetes)?		<input style="width: 40px;" type="text"/>	chronic sick	
1.11	Are there pregnant/ lactating women?		<input style="width: 40px;" type="text"/>	pregnant/lactating	
1.12	Including your own family, how many other families live here? (Families are considered separate if they do not eat together and do not share their income)		<input style="width: 40px;" type="text"/>		

II– FOOD CONSUMPTION

How many meals do you eat each day?	2.1	<input style="width: 40px;" type="text"/>
Consider only meals consumed at home or in public kitchen but not in private restaurants or street food Do NOT count food consumed in very small amount (less than a teaspoon per person) Only one code should be entered for each food item	How many days for the last 7 days did your family consume these food items? 0 = Not eaten 4= 4 days 1= 1 day 5 = 5 days 2= 2 days 6= 6 days 3= 3 days 7= 7 days	What was the main source of these food? 1= Own production/garden 2= Purchase in shops, markets, petty traders 3= Purchase at credit, borrowed 4= Received against work (in-kind payment) 5= Bartered against other goods 6= Received as gift from family or neighbours, begged 7= Humanitarian food aid 99= Not eaten during the 7 past days
Bread	2.2	<input style="width: 40px;" type="text"/>
Wheat (grain, flour), rice, maize, pasta, biscuits	2.4	<input style="width: 40px;" type="text"/>
Potatoes, sweet potatoes	2.6	<input style="width: 40px;" type="text"/>
Beans, chickpeas, lentils, peas	2.8	<input style="width: 40px;" type="text"/>
Vegetables	2.10	<input style="width: 40px;" type="text"/>
Fruits	2.12	<input style="width: 40px;" type="text"/>
Meat (red, poultry)	2.14	<input style="width: 40px;" type="text"/>
	2.3	<input style="width: 40px;" type="text"/>
	2.5	<input style="width: 40px;" type="text"/>
	2.7	<input style="width: 40px;" type="text"/>
	2.9	<input style="width: 40px;" type="text"/>
	2.11	<input style="width: 40px;" type="text"/>
	2.13	<input style="width: 40px;" type="text"/>
	2.15	<input style="width: 40px;" type="text"/>

Eggs	2.16			2.17		
Fish	2.18			2.19		
Dairy products (yogurt, cheese, milk)	2.20			2.21		
Vegetable oil, butter, grease	2.22			2.23		
Sugar, honey, jam	2.24			2.25		
2.26	Do you have stocks of food ? 1= Yes / 2= No			If No stocks, go to Section III		
How long will your stocks last for the family consumption? Write number of days (0 if no stock)						
2.27	Wheat (grain, flour)		days	2.28	Potatoes	days
2.29	Sugar		days			

III – EXPENDITURES

How much did your household spend in cash and in credit during LAST WEEK for food commodities (in KGS)?				How much did your household spend in cash and in credit during LAST MONTH for non-food items (in KGS)?	
		A - Amount (in KGS)	B - For how many days of consumption of purchased foods?		Amount (in KGS)
3.1	Bread			3.17	Housing (rent, repairs, tax)
3.2	Wheat (grain, flour), rice, maize, pasta			3.18	Community services (garbage, security, water)
3.3	Biscuits			3.19	Health (checkups, drugs, hospital fee)
3.4	Potatoes			3.20	Education (stationery, textbooks, fee)
3.5	Beans, chickpeas, lentils, peas			3.21	Celebrations, funerals, wedding, entertainment
3.6	Vegetables			3.22	Debt reimbursement
3.7	Fruits			3.23	Electricity
3.8	Nuts, walnuts, hazelnuts			3.24	Telephone (landline, prepaid card)
3.9	Meat (red, poultry)			3.25	Any other non-food expenditures (clothing, shoes, school uniform, hygienic items)
3.10	Eggs			3.26	Savings (informal/formal)
3.11	Fish			3.27	Cooking fuel(gas, wood, etc.)
3.12	Dairy products (yogurt, cheese, milk)			3.28	Cigarette
3.13	Vegetable oil, butter, grease			3.29	Alcohol
3.14	Sugar, honey, jam			3.30	Transportation
3.15	Coffee / tea			3.31	Other non-food (specify)
Apart from food purchased above, how much did your household use foods from own production and gifts from relatives for food consumption during LAST CALENDAR MONTH?					
		Amount (in Kilogram)		Amount (in Kilogram)	
3.32	Wheat			3.37	Meat (red, poultry)
3.33	Potato			3.38	Eggs
3.34	Beans, chickpeas, lentils, peas			3.39	Fish
3.35	Vegetables			3.40	Daily products (yogurt, cheese, milk)
3.36	Fruits			3.41	Cooking oil

Do you have some loans or credit to reimburse? 1= Yes / 2= No 3.42 ☐ → If No, go to Section IV

What are the main expenditures that you have covered with this money?

1= Yes / 2= No

Food	3.43		Transportation, diesel for car/trucks	3.50	
Water	3.44		Health care, drugs	3.51	
Gas, electricity, other cooking fuel	3.45		Schooling	3.52	
Soap, hygiene products	3.46		Ceremonies (including funerals)	3.53	
Clothing	3.47		Agricultural inputs, animal feed, irrigation	3.54	
Rental of housing	3.48		Rental of land	3.55	
Material to remove rubbles	3.49		Material to repair or reconstruct housing	3.56	

IV – INCOME SOURCES AND ASSETS

How many different sources of income do you have?	4.1	<input type="text"/>
What are the 4 main sources of cash for the family?	Ranking	Amount per month (KGS)

1= Sale of harvest of wheat, maize, potatoes, cotton etc. 2= Sale of vegetables or fruits 3= Sale of animal products or animals 4= Irregular wage labour unskilled r (e.g. seasonal, temporary) 5= Regular wage labour unskilled (e.g. driver, cleaner, guard) 6= Regular wage labour skilled (e.g. employee in factory) 7= Independent worker (e.g. carpenter, taxi driver) 8= Government employment (e.g. police, administration, health, school...) 9= Employment in UN agency or NGO 10= Sale of handicraft 11= Petty trade (street or market vendor without shop) 12= Small business (shop, café, etc) 13= Large business 14= Rent of land or rent of property 15= Pension, allowances 16= Remittances 17= Sale of humanitarian assistance 18= Sale of assets, sale of domestic belongings 19= Use of personal savings, sale of jewellery 20= Credit, loans from organizations, banks, money lenders 21= Charity from relatives, friends, neighbours 22= Sale of trees 23= Fishing 97= No 2 nd source of income (only one source) 98= No 3rd source of income (only 2 sources) 99= No 4 th source of income (only 3 sources)	4.2	<div> <div></div> <div></div> </div> Largest source	4.3	<div> <div></div> <div></div> </div> KGS/month
	4.4	<div> <div></div> <div></div> </div> 2nd source	4.5	<div> <div></div> <div></div> </div> KGS/month
	4.6	<div> <div></div> <div></div> </div> 3rd source	4.7	<div> <div></div> <div></div> </div> KGS/month
	4.8	<div> <div></div> <div></div> </div> 4th source	4.9	<div> <div></div> <div></div> </div> KGS/month

Do you have family members who live outside Kyrgyzstan ? 1= Yes / 2= No	4.10	<div> <div></div> <div></div> </div>
If No, go to Question 4.13		
If yes, do they help you out with money or goods ? 1= Yes/ 2= No	4.11	<div> <div></div> <div></div> </div>
If yes, how many times a year do you receive this help ?	4.12	<div> <div></div> <div></div> </div>

Do you have....		1= Yes / 2= No	
4.13	Stove		
4.14	Radio		
4.15	Sewing machine		
4.16	Motorcycle		
4.17	Storage for food ²		
4.18	Tractor/Combine/Seeding machine		
4.19	Television		
4.20	Cell phone		
4.21	Bicycle		
4.22	Car, truck		
4.23	Shop		
4.24	Bank account		

V – CROPS AND LIVESTOCK

Can you cultivate a land or a garden ? 1= Yes/ 2= No		If No, go to Question 5.30 on animals		5.1	<div> <div></div> <div></div> </div>
How much land do you cultivate?				5.2	<div> <div></div> <div></div> </div> hectares

	Which crops will you harvest this season? 1= Yes / 2= No If No, go to next crop	Approximately how much of it will you sell? (in %)	For how many months does the harvest of crop last for your family consumption? Note the total number of months. Write « 0 » if less than 1 month
Wheat	5.3	5.4	5.5
Maize	5.6	5.7	5.8
Potatoes	5.9	5.10	5.11
Cotton	5.12	5.13	5.14
Barley	5.15	5.16	5.17
Vegetables	5.18	5.19	5.20
Fruit trees	5.21	5.22	5.23
Fodder	5.24	5.25	5.26
Other	5.27	5.28	5.29

Do you have animals ? 1= Yes/ 2= No	5.30	<div> <div></div> <div></div> </div> If No, go to Section VI
Do you have adequate winter fodder ? 1= Yes/ 2= No	5.31	
How many poultry do you have?	5.32	
How many sheep and goats do you have?	5.33	
How many cows and bulls do you have?	5.34	
How many horses do you have?	5.35	
How many donkeys do you have?	5.36	

² Sufficient space for food stock at the house/yard for proper storage

In your opinion, what are 3 (three) major problems that prevent you from getting more yield or income from your agriculture-related activities (e.g. plant cultivation, cattle breeding), if any:					
5.37	No access to land plot / too small land plot	__	5.38	Low quality seeds	__
5.39	Low physical access to market	__	5.40	Low prices for harvested crops	__
5.41	Dry and prolonged summer season	__	5.42	Harsh and prolonged winter season	__
5.43	Infections/diseases/pests damaging crops	__	5.44	Shortage of / difficult access to water for irrigation / animals	__
5.45	Shortage of winter feed for animals	__	5.46	Shortage of pastures for grazing	__
5.47	Animal diseases	__	5.48	No or poor access to veterinary services	__
5.49	Low productivity of animals (too little meat or milk)	__	5.50	Low prices for livestock/livestock produce (meat, milk)	__
5.51	No / not enough agricultural tools	__	5.52	Other (specify_____)	__

VI – COPING STRATEGIES AND ASSISTANCE

In the past 7 days, if there have been times when you did not have enough food or money to buy food, how often has your family had to:		Number of days	Severity weight	Score=Number of days x severity Supervisor to fill in	
6.1	Rely on less preferred and less expensive foods?	__	1	__	__
6.2	Borrow food, or rely on help from a friend or relative?	__	2	__	__
6.3	Limit portion size at meal times?	__	1	__	__
6.4	Restrict consumption by adults in order for small children to eat?	__	3	__	__
6.5	Reduce number of meals eaten in a day?	__	1	__	__
During the past 30 days, have there been times when your family had to do the following in order to get money or food? 1= YES / 2= NO					
6.6	Consume seed stocks ?	__		__	__
6.7	Decrease expenditures for agricultural inputs or animal feed?	__		__	__
6.8	Sell household assets (e.g. radio, TV, furniture etc.)?	__		__	__
6.9	Sell productive assets (e.g. work equipment etc.)?	__		__	__
6.10	Sell animals more than usual?	__		__	__
6.11	Gather wild food, hunt or harvest immature crops?	__		__	__
6.12	Decrease health expenditures?	__		__	__
6.13	Increase the number of household members out-migrating for work or food?	__		__	__
6.14	If yes, who in your household out-migrated? (indicate the number of migrated person)				
6.14.1	Primary school-age children 6-11 years	__		__	__
6.14.2	Secondary school-age children 12-18 years	__		__	__
6.14.3	Adult men 19-60 years	__		__	__
6.14.4	Adult women 19-60 years	__		__	__
6.14.5	Adults above 60 years of age	__		__	__
6.15	Seek alternative or additional jobs	__		__	__
6.16	If your household found additional jobs, who in your household did so? (indicate the number of migrated person)				
6.16.1	Primary school-age children 6-11 years	__		__	__
6.16.2	Secondary school-age children 12-18 years	__		__	__
6.16.3	Adult men 19-60 years	__		__	__
6.16.4	Adult women 19-60 years	__		__	__
6.16.5	Adults above 60 years of age	__		__	__
6.17	If your household found additional jobs, what are the type(s) of activities?				
1= Sale of harvest of wheat, maize, potatoes, cotton etc. 2= Sale of vegetables or fruits 3= Sale of animal products or animals 4= Irregular wage labour unskilled r (e.g. seasonal, temporary) 5= Regular wage labour unskilled (e.g. driver, cleaner, guard) 6 = Regular wage labour skilled (e.g. employee in factory) 7= Independent worker (e.g. carpenter, taxi driver) 8= Sale of handicraft 9= Petty trade (street or market vendor without shop) 10= Small business (shop) 11= Sale of humanitarian assistance 12= Others (specify_____) 97 = No 2nd source of income (only one source) 98= No 3rd source of income (only 2 sources) 99=No 4th source of income (only 3 sources)				1 st additional income source __ 2 nd __ 3 rd __ 4 th __	

During the past 3 months, what are the major problems that you have faced: 1= Yes / 2= No			
6.20	High food prices		6.21 Violence, insecurity
6.22	High fuel prices		6.23 Health problems
6.24	Loss of employment		6.25 Other _____
6.26	Decrease of salary		

During the past 3 months, what are the major agriculture-related problems that you have faced: 1= Yes / 2= No			
6.27	Poor weather for agriculture	__	6.28 Lower harvest compared to the same season in previous years __
6.29	Natural disasters	__	6.30 No land / not enough land __
6.31	Problems with irrigation	__	6.32 Low selling price of crops/animal products __
6.33	High cost of agricultural inputs for crops and/or animals (e.g. fertilizer, fuel, seed, fodder)	__	6.34 Low quality seeds __
6.35	Animal infections/pests	__	6.36 Low productivity of animals (milk and meat)
6.37	No / not enough agricultural equipment	__	6.38 Other _____ __

During the past 3 months, have you received any of the following assistance: 1= Yes / 2= No			
6.39	Monthly Benefit/Monthly social benefit / other allowances	__	6.40 Food __
6.41	Distribution of cash from organizations/government	__	6.42 Agricultural inputs (fertilisers, tools, seeds) __
6.43	Other _____		__



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