FOOD SECURITY BULLETIN – 2

Food Security Monitoring System

Data collected in rural areas in January 2009

Highlights

- From November 2008 to late January 2009, severe food insecurity appears to be less widespread in Tajikistan than it was in October 2008 or in April 2008. Nonetheless, chronic food insecurity remains a serious issue; results show that similar zones continue to be most affected.
- Sughd and Khatlon remain the most food insecure regions in Tajikistan, especially the B. Gafurov and Mastcho areas in Sughd and Muminobod and the Temurmalik and Khuroson areas in Khatlon.
- The food security monitoring in January 2009 identified around 1.5 million people as food insecure, with 400,000 of them severely so (see Annex 1 on page 9 for more details). Many households moved from being severely to moderately food insecure.
- Nutrition results show that the status of children remains at poor levels and has overall neither improved nor worsened since April 2008. 5.5% of children appeared to be wasted (4.7% in April 2008) and 32.9% stunted (27.5% in April 2008). Potential causes of malnutrition in children and women appear to be inadequate complementary feeding practices, food consumption of both mothers and of the whole household
- In the coming months, short-term and long term-assistance activities should be combined to reduce chronic food insecurity. Projects addressing water shortages for human consumption, livestock and agriculture should be a priority, as well as projects addressing lack of income for food purchase.
- Access to food remains the main issue affecting food security in Tajikistan.

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Overview

From this second round of data collection, trends start to appear and, although one more round is needed to have a one-year comparison, some zones confirm their level of food security or insecurity. Also, overall, it can be noted that severe food insecurity that was mainly caused by last year's shocks has started to show improvement. Now **the majority of food insecure households are moderately food insecure** (21%) which means that on one hand they **have improved their food access** (mostly thanks to cash injections from returning migrants before the winter months and the stable but still comparatively high food prices). On the other hand people remained vulnerable to shocks as most have not built sustainable assets and continue to use mostly **negative and harmful coping strategies**: skipping meals for entire days or eating seeds, for example but this remains localized.

The dependence on remittances make most of the households dependent on the economic situation in Russia which will, together with the next harvest, determine the level of food security in the country[1]: **remittances represent more than 50% of the total income for 55% of the households** receiving money transfer in the past three months. And for 41% of them, it even represents more than 2/3s of their total income (especially in zones 1, 9, 12 and 18). Moreover, households have **confirmed a decrease of**

[1] See Annex 4 - Remittances forecast and possible scenarios, page 9

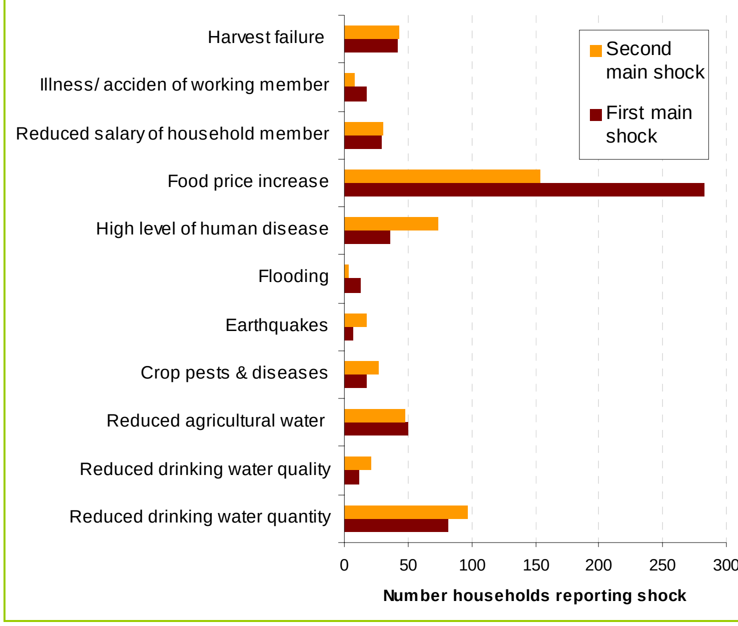
remittances received, as pointed out by the IMF and Tajik banks in the past three months. 50% of the households with migrants have not received any remittances in the past three months, and among remittances recipients, 60% reported receiving less than usual. This trend is also confirmed by income data and by the fact that **43% of households estimate their economical situation as worse** than last year (1% finds it better). It is to be noted that most households reported receiving irregular remittances in general, and that the normal yearly increase in late January/early February did not happen this year.

This difficult and precarious economic situation is forcing households to take on new debts, mostly to buy and stock food (and feed). Half of the households surveyed have taken on new debts and 1/3 of them will not be able to repay them before 2 months (all severely food insecure households borrow money exclusively for buying food). Shopkeepers also confirmed receiving more demand for credit and result confirm that **75% of the households depend on the market** as a main food source. Calculations and updates of the cost of a minimal food basket (equivalent to 2,250 kcal) show that 95 TJS per person and per month are now needed to meet basic food needs (see below). When correlated with the household income, it was found that the majority of households in rural areas could afford it (apart from zones 1, 6, 10 and 17).

Despite a reduced number of households citing unusually high food prices as the main shock over the past three months, higher prices still remain the main problem (see Figure 1). Another issue that was confirmed as one of the main problems for households and communities is water shortage for both consumption and agriculture. Although data confirms this issue for rural areas, recent reports are now highlighting similar issues in urban areas. **The lack of water is the main issue for half of the households** of the sample and might have also caused the reported increase in diseases all over the country. Outbreaks of water-related diseases continue to present a risk, while the main causes of death reported by key informants continue to be old age, blood pressure and heart diseases. Tuberculosis remains a concern in certain regions. Moreover, already under-resourced hospitals and health centers have not been able to function properly due to electricity disruption, which then leads to water shortages, creating a seriously unhygienic environment in health facilities.

The **energy crisis** which Tajikistan faces does not only impact on the health sector, but also industries and households. Reports of lower capacity of production of many businesses have led to some households losing essential income or declaring bankruptcy. Although the Government plans on building additional small-hydro-power plants, the problem will not be solved in the coming months. Temperatures have not been as low as last year, but in certain regions (mainly mountainous ones) schools have remained closed longer than usual. Half of the households reported that the main issue with heating was linked to electricity cuts apart from zones in Sughd where the availability of firewood and charcoal was the main constraint. **Half of the households in rural Tajikistan used candles as the main source of light** over the past three months (kerosene lamp was second). Cow dung remains also an important source of cooking (and heating) for 66% of the households.

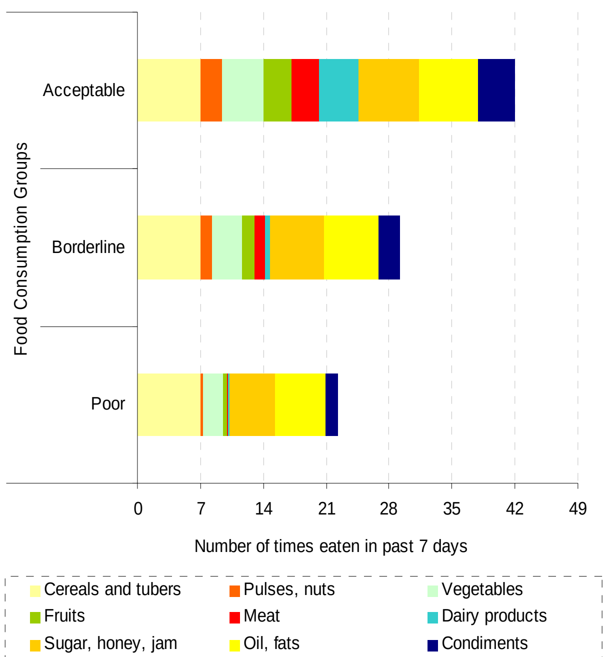
Figure 1: Main shocks reported by households - past three months



Key informants and households reported a **decrease in the number of livestock owned**; although not in all the zones (losses were especially important in the Sughd region). For some, possession of livestock has been essential over the past three months to maintain food security, but lack of feed, diseases and lack of adequate shelter for the animals remain a problem in many zones. The quality of seeds was reported as higher than last year; this might be due to ongoing assistance programs in several zones. Thanks to favorable weather conditions, **farmers interviewed reported an opportune time for the last sowing**. The recent and forecasted rains for March and April and a snow cover above normal average will probably help reduce the risk of drought and increase yields. The Government has recently endorsed an agriculture development concept but reforms in the cotton sector are still not sufficient. It also remains to be seen whether these initiatives will allow farmers to reduce debts and to increase their income in the months following harvest. The goal of the Ministry of Agriculture is to bring cereal production to 1 million tons this year to reduce dependence on imports.

If this goal is reached it could help reduce food prices in local markets and bring additional financial resources to households. However, households and recent surveys reported that agricultural problems remain structural: lack of equipment, fertilizers, access to market, lack of quality seeds, need for land reform, debts and manpower.

Figure 2: Food item consumed by food security group - past 7 days



Household's expenditures remain similar to the ones observed in April and October nationally and at zone levels. Households still spend around 65% of their total income on food and an increase on fuel and transport was observed in mountainous regions. Data on income does not allow for precise estimation of average income per zone but the income sources remain similar to the ones observed previously: 20% of the households report remittances as their main income source, 20% report agriculture (combining crops, livestock and orchard), 17% rely on daily wage labor, 16% on salaries and government jobs and 10% on pensions and other government benefits. Severely food insecure households mainly depend on begging, handicraft and remittances. Food consumption shows similar patterns as well with 61% of the households reporting to have problems satisfying their food needs in the past three months. Results also show that men and children eat around 3 meals a day while women eat on average 2.7 times a day. In some zones (14 and 15) adults had less than two meals the day prior to the survey. Figure 2 shows the repartition of food items eaten the week before the interview per food consumption status: consumption of fruits, vegetables, meat, and dairy products remain very low for food insecure households.

<u>Food price data[2]:</u>
According to shopkeepers interviewed in the villages, the main reasons for price changes remain the same: prices at the procurement source, increase in transportation costs and poor harvest for DRD and Khatlon regions.

Wheat: Prices for both wheat flour high quality and first grade remains stable over the past weeks and even have fallen since October and in comparison to their levels of last January. They remain nonetheless quite high compared to early 2007. These trends follow closely the world market price of wheat grains. Wheat of high quality is back on the market in Kurgan Tyube but at higher prices then national average (2.60 TJS/kg).

Potato: Prices for potato have gone up since last November which is a normal trend for this commodity looking at prices since 2002. After November, prices stabilized and fell again and are now below January 2008 prices at 1.50 TJS/kg nationally with the exception of Khorog were prices have gone up and only recently stabilized at 2.5 TJS/kg.

Pulses: For pulses, it is also a normal trend that the prices go up at the end of the year/beginning of winter. Nonetheless, since early 2004, the price of the commodity has never been so high (3.5 to 5 TJS/kg) despite a slight decrease in November 2008. In Gharm, prices are now going back up again since December but stabilizing at 4 TJS/kg. Lower prices were reported from Khujand (3.5 TJS/kg) and higher prices (but stable) from Khorog (5 TJS/kg).

Oil: After the steep increase in prices in 2007 and peaks in summer 2008, oil prices are going down (both cotton and vegetable oils). Prices remain double compare to the same period in 2007. Prices in Gharm and Dushanbe have increased again since beginning of 2009.

Other commodities:

→ After a significant decrease between October and the first week of January, the prices of petrol and diesel have recently gone up, except in Khorog where they remain stable

→ Prices of milk and dairy products continue to increase slightly apart from Gharm where they remain stable.

→ Prices of coal have remained stable all along the winter months so far and even decreased in certain regions.

Food basket[3]: Since November 2007, WFP estimates that the price of the minimum food basket (based on

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[2] See Annex 2 – Market Prices of Basic food Commodities, page 10
[3] Nominal prices, including inflation

methodology used by the World Bank for the 2007 TLSS) has gone up from 88.70 TJS/month/person in November 2007 to almost 91.62 TJS one year later to reach 95 TJS in February 2009.

Nutritional status and diet of children under 5 years

Amongst the 559 children measured, 5.6% were wasted and 30.1% stunted (Table 1 and 2). These results are similar or slightly higher than the rates obtained in April 2008 (4.7% and 27.5% respectively).[i] Nutritional status of children appears to remain at poor levels and has neither improved nor worsened. At the same time, 7 % of children were overweight. This indicates an increase since 2005, where overweight rates were 4%.[ii] It also reflects the double burden of over- and under-nutrition, which has also been observed in other central Asian countries.[iii]

Table 1: Nutritional status of children under 5 (weight-for-height)

	Severely wasted (%)[a]	Moderately wasted (%)[b]	Normal (%)	Pre-obese (%)[c]	Obese (%)[d]
GBAO	0	2.86	82.86	14.29	0
DRD	0	1.72	94.83	1.72	1.72
Khatlon	3.11	5.70	83.94	5.18	2.07
Sughd	2.26	2.82	87.01	5.08	2.82
Total	**1.92**	**3.65**	**87.33**	**4.99**	**2.11**

[a]z-score <-3; [b] z-score ≥ -3 and < -2: [c]z-score > 2 and ≤ 3, [d]z-score >3; using WHO Child Growth Standards 2005.

Table 2: Nutritional status of children under 5 (height-for-age)

	Severely stunted (%)[a]	Moderately stunted (%)[b]	Normal (%)
GBAO	17.14	8.57	71.43
DRD	12.93	13.79	71.55
Khatlon	12.44	21.24	60.62
Sughd	13.56	15.82	66.67
Total	**13.24**	**16.89**	**65.83**

[a]z-score <-3; [b] z-score ≥ -3 and < -2; using WHO Child Growth Standards 2005.

Comparing the nutritional status of children with the assessment in April 2008, the results suggest that global acute malnutrition has not changed overall, but stayed at similar levels as observed in April 2008 (Figure 1). In Khatlon and Sughd, wasting prevalence appears higher than in 2008. Severe wasting was also only observed in those two regions. Wasting rates were particularly higher in younger age groups (under 24 months), which is likely to be associated with poor infant feeding practices. Overall stunting rates show higher levels than in 2008 (Figure 2). Higher rates in global chronic malnutrition were particularly observed in Khatlon and Sughd.

Despite difficulties to compare the current findings with previous surveys[ii,iv] due to differences in sample size and reference standards used, an overall reduction in acute and chronic malnutrition could be seen since 2005.

Figure 1: Trend in Global acute malnutrition since 2005[4]

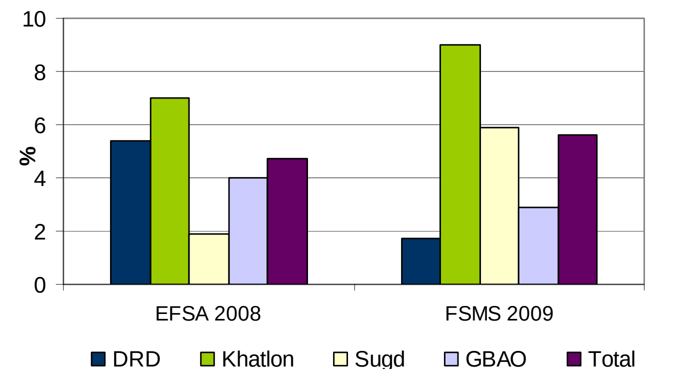
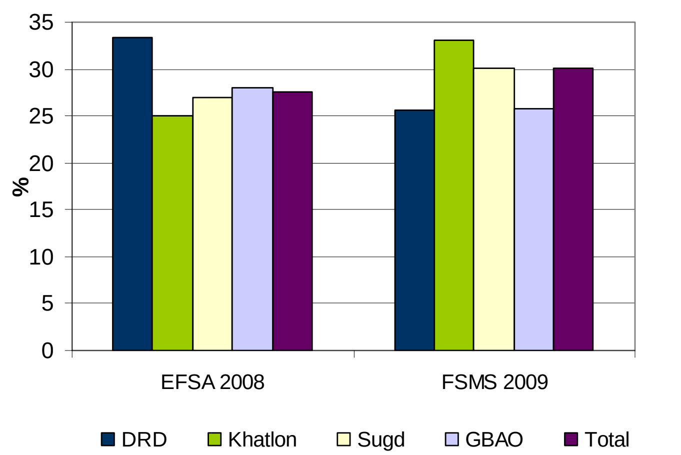


Figure 2: Trend in Global chronic malnutrition since 2005[5]



Breastfeeding: All children under 6 months of age received breast milk the day before the assessment. Children that were not exclusively breastfed under 6 months, received additionally animal milk, plain or sugar water, tea, bread or potatoes.

Complementary feeding: At six months, only 26% of children received solid or semi-solid foods (Figure 3). The diet of children did not include any legumes, eggs or meat, which are recommended as important sources of protein and iron. After nine months, still only 36% of

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[4] Global acute malnutrition: wasting, proportion of under 5 children with weight-for-height below -2 z-scores; using WHO Child Growth Standards 2005

[5] Global acute malnutrition: wasting, proportion of under 5 children with weight-for-height below -2 z-scores; using WHO Child Growth Standards 2005

children were given semi-solid foods. In the same line as one previous assessment on complementary feeding patterns[v], the current data shows that complementary feeding is neither timely, nor adequate.

Figure 3: Breastfeeding and introduction of complementary foods

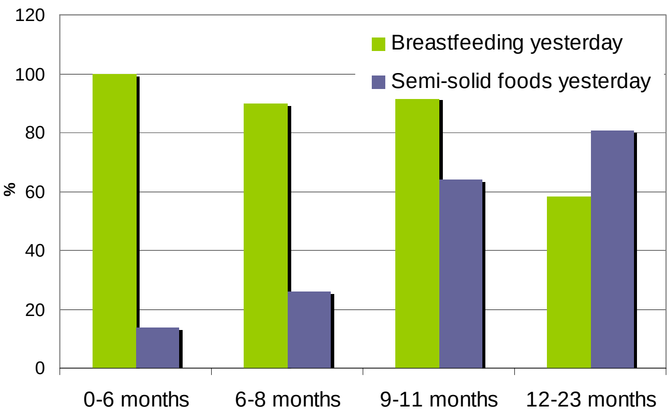
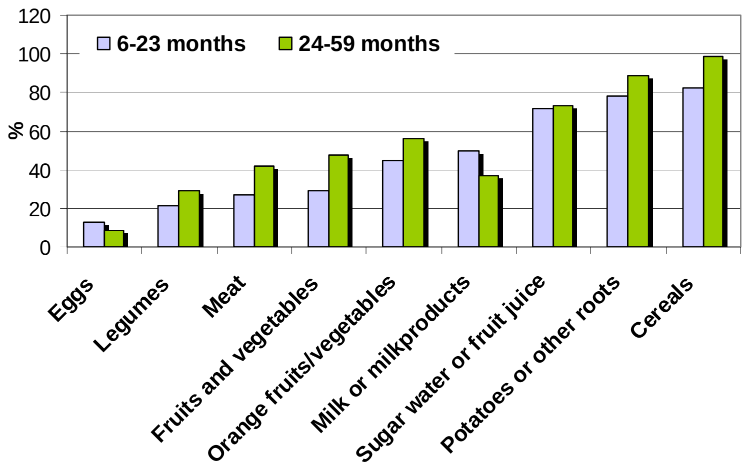


Figure 4: Percentage of consumers of different food groups



Dietary diversity in all children between 6 and 8 months was low (less than three food groups yesterday[6]). In children between 9 and 11 months, only 36% showed middle or high dietary diversity (three or more food groups). In the age group between 12 and 23 months, 60% of children received three or more food groups the day before. Less than half of all children did not receive meat or meat products, eggs or legumes the day before the assessment (Figure 4).

Nutritional status and food consumption of women (19-49 years)

Though comparison with previous surveys should be done with caution, a trend towards higher overweight and obesity rates can be observed (Table 3). Overweight and obesity was particularly seen in DRD, Khatlon and Sughd, whereas underweight was highest in GBAO.

Table 3: Trend of nutritional status of women (%)

	MSST 2003[vi]	NNS 2006[iv]	FSMS 2009
Underweight BMI <18.5	8.6	11	6.3
Normal BMI 18.5-24.9	65.8	66	62.6
Pre-obese BMI >25	18.5	17	22.3
Obese BMI >30	7.1	6	8.9

Food consumption of women: Only 15.6 % of women consumed five or more food groups the day before the assessment. With regards to the food groups, similar dietary patterns as in children could be observed. Less than half of women consumed meat, fruits or vegetables, legumes or eggs the day before.

Preliminary analysis on possible underlying causes of malnutrition suggest that lack of micronutrient intake in children due to inadequate complementary feeding practices and food consumption of mothers. The whole household could be a cause for malnutrition in those children and women. Further analyses are needed to confirm these assumptions.

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[6] The dietary diversity score ranges from 0 to 7, including the following food groups: Grains, roots and tubers; legumes and nuts; Vitamin A-rich fruits and vegetables; other fruits and vegetables; dairy products; eggs; meat, poultry, fish, and shellfish.

Scenarios and recommendations

For the next three months, the food security situation of many households will be dependent on several factors:

- **Remittances and migration**: already reported in the last bulletin, this factor remains one of the most important. Remittances, although still high, will dictate access to food of at least 30% of the households nationally. Households with other sources of income (pension and salaries) and with livestock should be able to cope until the harvest;

- **Employment**: as the financial crisis intensifies, the additional burden on households and the loss of valuable income sources will only be mitigated if migrants are able to find work in Tajikistan or in Russia. The Ministry of Labor has estimated that between 200,000 and 300,000 people will be in need for work. Immediate opportunities are rare although some migrants should be able to find temporary employment in construction projects (Roghun dam, for example). But daily wages have already started to decrease, which might push many migrants to return to Russia (or other countries) illegally. Results show that many have not come back like they normally do before the winter;

- **Weather and harvest**: the weather forecast for the next months seems favorable to both a good harvest and good pastures. Recent seed programs (distribution and sales) and allocation of land for wheat should also help households after the harvest. But excessive rains and snow cover could also bring additional flooding and other shocks that might further affect localized pockets of households into severe food insecurity. Rains and snowmelt should also help to fill reservoirs and prevent the energy crisis from worsening;

- **Government's spending**: as remittances decrease and migrants are not be able to return to their migration destination, the impact on the economy will be significant. The pressure on the government spending in sectors such as health and education is feared to increase as the social safety net that the remittances constitute might significantly decrease. Also, the decrease in world prices of cotton and aluminum will further aggravate government's budget;

- **Water access and health**: although good rainfall should help agriculture, the problem of drinking water remains a major concern in the rural (and urban) areas. An outbreak of water-related (water-borne, water-washed) diseases remains a major concern. This is linked to electricity shortages to power water systems, and to deteriorating infrastructure.

- **International financial crisis and prices of food**: the recent decrease of the value of national currency is closely connected to the international crisis, and in particular, the value of the ruble. Food prices also remain highly volatile and at their highest compared to previous years. The combination of both factors could have a serious impact on household food security in the coming months.

- **Nutritional status and dietary intake:** Nutrition results show that the status of children remains at poor levels and has overall neither improved nor worsened since April 2008. Given that the previous assessment should present a reflection of nutritional outcomes after the winter crisis, an improvement in nutritional status following the harvest season could have been expected in January. Potential causes of malnutrition in children and women appear to be inadequate complementary feeding practices, food consumption of both mothers and of the whole household. Further analysis is needed to assess the effect of trends in household food security and food prices on the nutritional status of individuals.

It appears that some households might have finally recovered from the compounded crisis of the last winter and have managed to increase their food security. Nonetheless, results confirm that 1.5 million people are still facing food insecurity, most of them chronic. Therefore, it is recommended to:

- Assist food-insecure households with short-term assistance in the zones identified as priority (see map below), through cash or food assistance;

- Combine as much as possible short- and medium-term assistance with long-term schemes, such as food for work, food for training, cash for work, cash for training and micro-credit. These activities should target improved food access of the most vulnerable households;

- Reinforce and develop large-scale, long-term projects on employment and income-generation. Discussions on reforestation and development of orchards have already started and should be pursued. The Government should continue its efforts in decreasing unemployment rates and in creating work for migrants in-country;

- Government and partners should make water access the main priority of the next months and the need for drastic and coordinated responses has become critical;

- Government and partners should continue to work together on disaster risk reduction projects in the coming months to prevent the impact of floods on already vulnerable households.

Food Security Monitoring System – Background and methodology

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The April 2008 joint assessment recommended improving the mechanisms to regularly monitor the food security.

The approach used for the FSMS is one which best balances cost and level of detail for a monitoring system, rather than a one-off assessment. The FSMS gathers data every quarter from 665 households and 475 key informants in all rural areas of Tajikistan. The methodology is based on the one also used for the joint assessment in April. The same households are being interviewed every three months and for round 2 only 5% of the households were different. This will allow fair comparison between the two rounds. More detail on the methodology is available on request and on www.untj.org.

It is to be noted that the relatively low number of households in each zone also calls for caution when interpreting the results on a broader scale.

There may be a need for further investigation when figures are strikingly low or high, or significantly different from previous monitoring results.

For round 2, new indicators were introduced to measure food security and food access. **The Coping Strategy Index (CSI)** measures the frequency at which households adapt negative coping mechanism having a damaging impact on their food consumption (such as reducing quantity and quality of meals, adults restricting their consumption for children, etc.). More information on the indicator can be found at: www.fao.org/crisisandhunger/root/pdf/cop_strat.pdf

The second round also included a nutrition component. Information on nutritional status (weight and height) of 559 children under 5 years and 944 women between 19 and 49 years has been collected. Furthermore, infant feeding practices and food consumption of women has been assessed. Most previous nutrition surveys selected clusters along the four administrative regions and not like the FSMS agro-ecological zones. Comparison at regional level should be done with caution and extrapolation of results at the zone level is not possible.

WFP also used methodology from the TLSS 2007 to compare the evolution of the **minimal food basket** and to estimate households able to afford the 2,250 kcal required for a healthy consumption. More detail on the methodology is available on request

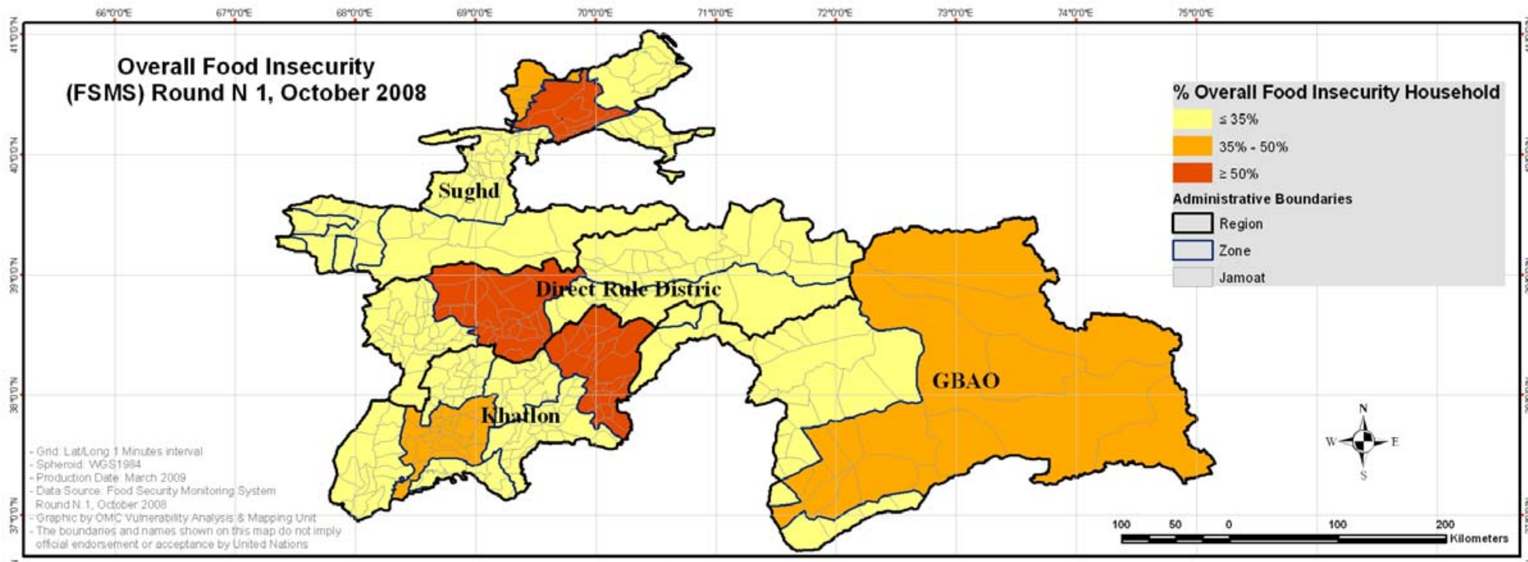
Data was collected and managed by the NGO CSR Zerkalo for the household part and by the National Institute of Statistics and the Republican Center for Nutrition for the anthropometric measurement and nutrition questionnaires. Data analysis was conducted by WFP Rome and WFP Tajikistan for the household data and by WHO Tajikistan and WHO Geneva for the nutrition data. Mapping was done by WFP Regional Bureau in Cairo.

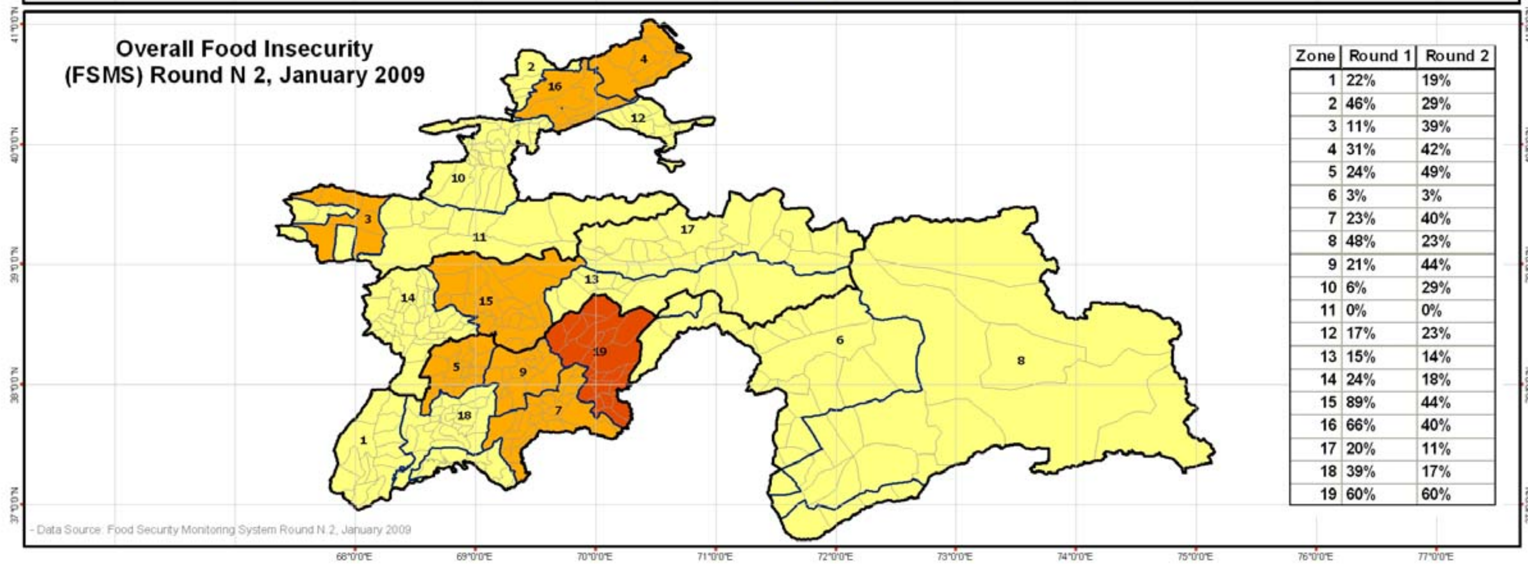
The next round of data collection is planned for second half of April 2009 and should include some qualitative methods such as focus groups. Trends for one year since the April 2008 assessment will also be presented in the next bulletin.

Links between nutrition status and household food security are still being analyzed and will be shared separately. The analysis will also look into the impact of food prices and trends in household food security since October 2008.

For more information on the results and methodology and for a copy of the database, please contact Mr. Cedric Charpentier: cedric.charpentier@wfp.org

For more information on the results linked to nutrition, please contact Ms. Ursula Trübswasser: utr.who@tajnet.com





Zone	Round 1	Round 2
1	22%	19%
2	46%	29%
3	11%	39%
4	31%	42%
5	24%	49%
6	3%	3%
7	23%	40%
8	48%	23%
9	21%	44%
10	6%	29%
11	0%	0%
12	17%	23%
13	15%	14%
14	24%	18%
15	89%	44%
16	66%	40%
17	20%	11%
18	39%	17%
19	60%	60%

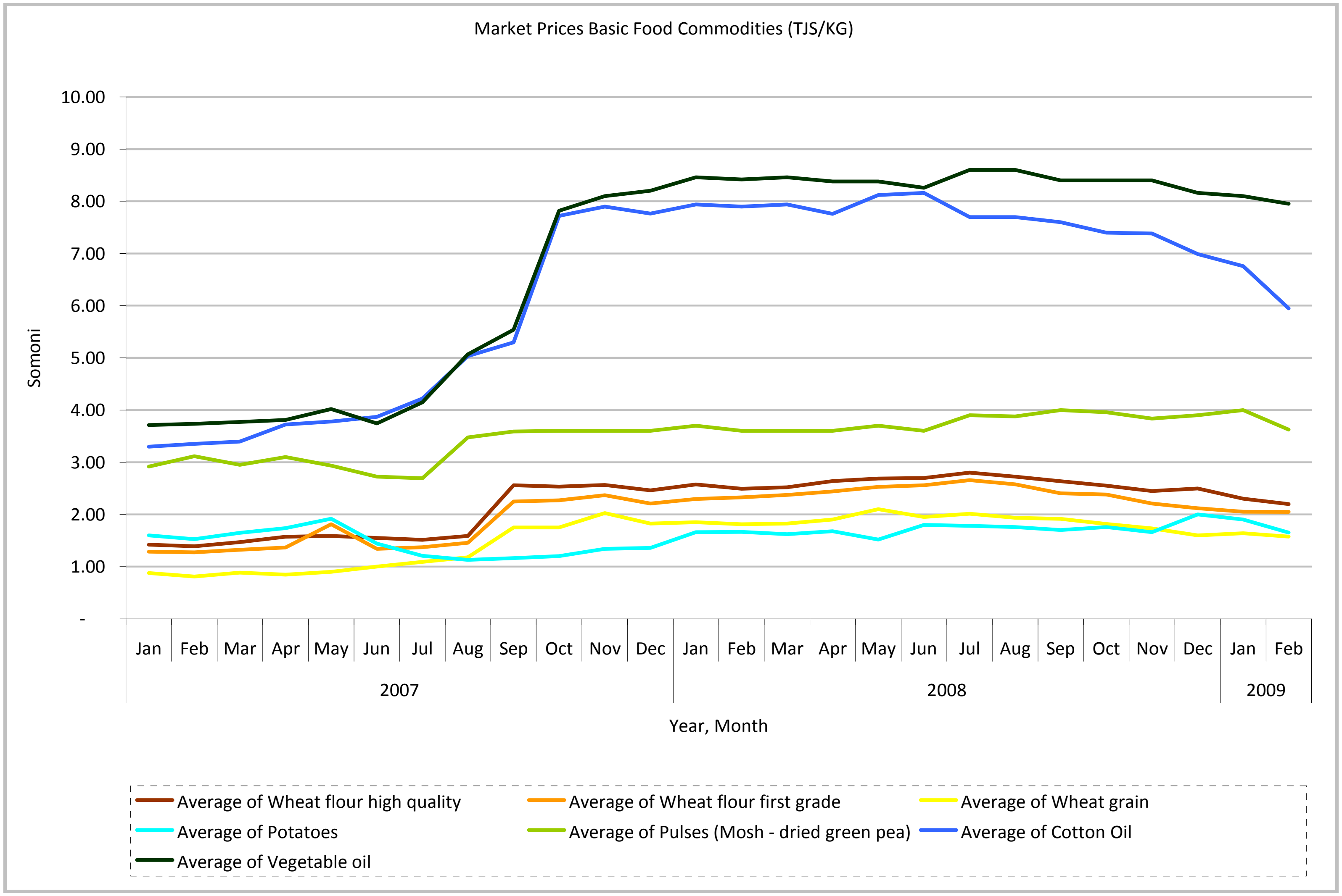
Jamoats selected: 1- Panj, 2- Avzikent, 3- Loiq Sherali, 4- Qirquduq, 5- Hiloli, 6- Vanj, 7- Zarbdor, 8- Vankala, 9- Tabnochi, 10- Mujum, 11- Urmetan, 12- Khonaobod, 13- Yakhakyust, 14- Navobod, 15- Gumbuloq, 16- Utkansoy, 17- Alga, 18- Jilikul, 19- Balkhobi

Annex 1 – FSMS ROUND 2- RURAL AREAS TAJIKISTAN - ESTIMATION OF NUMBERS OF FOOD INSECURE PEOPLE

Zone	Households	People	Severely food insecure			Moderately food insecure			Total food insecure		
			%	Number households	Number people	%	Number households	Number people	%	Number households	Number people
13	2,057	94,843	3	62	2,845	11	226	10,433	14	288	13,278
14	106,395	711,578	6	6,384	42,695	12	12,767	85,389	18	19,151	128,084
15	43,080	357,963	9	3,877	32,217	35	15,078	125,287	44	18,955	157,504
17	30,140	192,893	0	0	0	11	3,315	21,218	11	3,315	21,218
DRD	**181,672**	**1,357,277**	**5**	**10,323**	**77,757**	**17**	**31,387**	**242,327**	**21.75**	**41,710**	**320,084**
6	13,166	84,434	0	0	0	3	395	2,533	3	395	2,533
8	7,386	41,095	3	222	1,233	20	1,477	8,219	23	1,699	9,452
GBAO	**20,552**	**125,529**	**2**	**222**	**1,233**	**12**	**1,872**	**10,752**	**13**	**2,094**	**11,985**
1	67,534	410,143	0	0	0	19	12,831	77,927	19	12,831	77,927
5	45,066	314,729	17	7,661	53,504	31	13,970	97,566	48	21,632	151,070
7	51,006	432,047	9	4,591	38,884	31	15,812	133,935	40	20,402	172,819
9	18,351	138,492	15	2,753	20,774	29	5,322	40,163	44	8,074	60,936
18	73,618	523,260	7	5,153	36,628	10	7,362	52,326	17	12,515	88,954
19	22,835	180,413	17	3,882	30,670	43	9,819	77,578	60	13,701	108,248
KHATLON	**278,410**	**1,999,084**	**11**	**24,040**	**180,460**	**27**	**65,116**	**479,494**	**38**	**89,156**	**659,954**
2	11,982	77,652	12	1,438	9,318	18	2,157	13,977	30	3,595	23,296
3	26,187	116,665	6	1,571	7,000	33	8,642	38,499	39	10,213	45,499
4	26,266	110,672	6	1,576	6,640	36	9,456	39,842	42	11,032	46,482
10	100,864	531,843	12	12,104	63,821	18	18,156	95,732	30	30,259	159,553
11	18,640	90,519	0	0	0	0	0	0	0	0	0
12	58,980	271,166	3	1,769	8,135	20	11,796	54,233	23	13,565	62,368
16	50,933	276,858	14	7,131	38,760	26	13,243	71,983	40	20,373	110,743
SUGHD	**293,852**	**1,475,375**	**8**	**25,589**	**133,675**	**22**	**63,448**	**314,267**	**29**	**89,037**	**447,941**
TOTAL	**774,486**	**4,957,265**	**8**	**60,173**	**393,125**	**21**	**161,824**	**1,046,840**	**29**	**221,996**	**1,439,965**

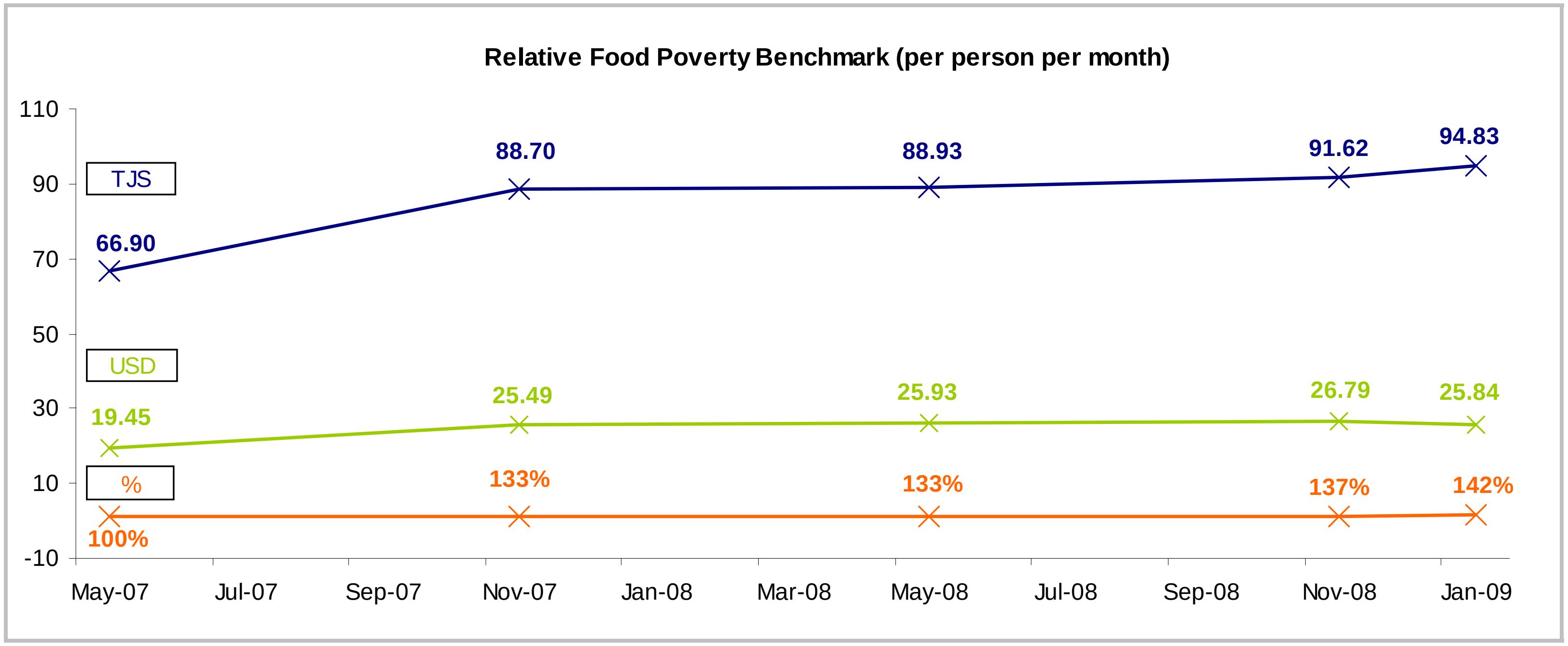
Low numbers of households and sampling method call for caution in interpreting results and numbers presented in the table.

Annex 2 – Market Prices of Basic food Commodities



Source: WFP, 2008 – Average for prices for all markets surveyed (Dushanbe, Khorog, Khujand, Gharm, and Kurgan Tyube). Last prices collected last week of February apart from Khorog for which last prices collected are from second week of January)

Annex 3 - Relative Food Poverty Line / Estimated Minimal Food basket



		May-07	Nov-07	May-08	Nov-08	Feb-09
Food Poverty Benchmark	in TJS	66.90	88.70	88.93	91.62	94.83
	in %	100%	133%	133%	137%	142%
	in USD	19.45	25.49	25.93	26.79	25.84
	in %	100%	131%	133%	138%	133%

The figures are based on the Food Poverty Line as calculated by the World Bank for the TLSS 2007 and represent estimates from the World Food Programme. Estimates are based on monthly exchange rate and food prices collected weekly by WFP in 5 main markets of Tajikistan. Prices are nominal.

Annex 4 - Remittances forecast and possible scenarios[7]

It is estimated that up to one million Tajiks sent approximately 2.65 billion US dollars to Tajikistan in 2008. This amount is estimated to represents nearly 55% of the country's GDP.[8] As financial markets falter and global commodity prices fall, both demand for labor as well as real wages are sure to affect migrant workers ability to maintain their current remittance levels.

Taking into account both wages and overall demand for labor in Russia, the following table shows how decreases in overall migrant labor force as well as decreases in per-worker wages can affect overall remittances in 2009. From the table, we see that an overall 20% decrease in overall demand for migrant labor coupled with a 20% decrease in wages affects remittance levels.[9]

Exacerbating the decline in remittance due to falling wages and demand for labor is a sharp decline in the Russian Ruble versus the US Dollar. Between July 30, 2008 and January 25, 2009 the Russian Rubble fell from a high of 23.3 Rubles per dollar to 32.8 Rubles per dollar, a 40% decline.[10] Since the majority of migrant workers earn Rubles and then convert earnings into dollars prior to remitting to Tajikistan, depreciation of the Russian Ruble further decreases the amount of actual dollars being remitted.

Without taking into account depreciation of the Russian Ruble, if the above scenario were to come to fruition, Tajikistan will experience a decline in overall remittance by approximately 840 million USD, accounting for 17% of GDP.

As foreign currency inflows decline, depreciation of the Tajik somoni is taking place as demand for US dollars increases due to a shortfall in the National Bank's foreign currency position. This is not due to a traditional inflation model, rather a shortfall in foreign currency. This could further reduce GDP value.

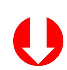
Year/Scenario	Remitances Values (USD)				2009 Scenarios vs. 2008 Data			Remitances vs. GDP		
	Number of Migrant Workers	Annual per Worker	Annual National Total	Reduced for RR Currency Devaluation	Number of Migrant Workers	RR currency Devaluation	TJS Currency Devaluation	Remitances as % of GDP	GDP Value	Adjusted for TJS Currency Devaluation
2008	1,000,000	$ 2,650	$2,650,000,000	$2,650,000,000	100%	0%	0%	55%	$ 4,818,181,818	$ 4,818,181,818
2009 (Best)	900,000	$ 2,650	$2,385,000,000	$1,669,500,000	-10%	-30%	-10%	44%	$ 3,837,681,818	$ 3,453,913,636
2009 (Likely)	800,000	$ 2,650	$2,120,000,000	$1,272,000,000	-20%	-40%	-20%	37%	$ 3,440,181,818	$ 2,752,145,455
2009 (Worst)	700,000	$ 2,650	$1,855,000,000	$ 927,500,000	-30%	-50%	-30%	30%	$ 3,095,681,818	$ 2,166,977,273

[7] Analysis was provided by Mr. Beau Taylor, consultant
[8] Data source: International Monetary Fund/National Bank of Tajikistan/World Bank
[9] These estimations are based on an overall migrant labor force of 1 million and overall remittance of 2.65 billion.
[10] Historical exchange related data was found at, http://www.exchange-rates.org/history/RUB/USD/T

Annex 5 – Analysis and review of results by zone

Zone (district)	Situation Report	Immediate/ Underlying causes & Recommendations	Outlook October - January	Baseline information
Severely Food Insecure Zones (more than 50% of overall food insecure households – including severe and moderate food insecurity)				
19 (Baljuvon, Khovaling, Muminobod, Shurobod)	60% of the households are food insecure. Total of roughly 110,000 are food insecure	Despite continuous assistance to households in this zone that might have helped to reduce severe food insecurity, the **situation remains critical**: food consumption is inadequate, more than 50% of the households report worsening of their economical situation compared to last year, **66% have contracted new debts for food** and feed over long periods (more than 7 weeks), several households reported sending migrants to Russia and diseases have increased (mainly flu and diarrhea) in the last three months. The main causes of food insecurity in the region reside in structural problems (reduce water quantity and quality, lack of infrastructures) and in high food prices (cited by most households and shop keepers as main problem). **Households use mostly negative coping strategy** related to reducing quality and quantity of food to face problems. Stocks owned are of average quantity. In the coming months, households will still face difficulties and assistance should be provided in priority to vulnerable households in this zone. Although short-term help will be welcome, crucial long-term development projects are needed to sustain food security.		This zone has been of concern since April 2008 due to high numbers of food insecure households. Coping strategies used by households in this zone are among the most negative.
Highly Food Insecure Zones (between than 35 and 49% of overall food insecure households – including severe and moderate food insecurity)				
5 (Khuroson, Jomi, Yovon)	48% of households interviewed are food insecure among which 17% severely: around: 150,000 people	**1/3 of the households depend on remittances** for a living. No increase in migration or return of migrant was reported. Remittances are mostly irregular and have decreased which might explain why some households fell into severe food insecurity as their access to food (worsened by increase in prices reported by traders) was significantly reduced. Also, **80% were forced to contract new debts** to buy food and **15% to rely on begging** and borrowing from relatives (also the main second source of income). The rest of the households depend mainly on daily wage labor and the reported main shocks (pest, crop failure) have also affected their access to food and therefore food consumption (food expenditures amount to 74% - 63% average - of total expenditures). It appears that households have means to cope for the moment but stocks are low and **planting was recorded as low and late**. ½ of the households reported slightly better economic situation. Food security status in lean season will mostly depend on flow of remittances and later on harvest.		Situation seems to have gone back to April 2008 levels. Survey confirmed high reliance on remittances and government salaries
9 (Dangara, Temurmalik)	44% of the population is food insecure out of which 15% severely: around 61,000 people	Remittances play an important role in households' income as 26% households rely on them. **Deterioration of the situation in this zone** could be explained mainly by the same factors as in neighboring zone 7: **few migrants returned over the past three months and those who did did not bring back remittances**. The recent decrease in remittances has threatened the sustainability of this income-generating activity. At the same time, **stocks of food are mostly of low duration** (less than three weeks) and the high reliance on the market does allow for improvement of the situation. Livestock ownership remains low (apart from donkeys). Situation in the coming months will depend mostly on remittances, wage labor rate and harvest. Households should be supported with short and long term assistance in the coming months especially on livelihood and income-generating schemes.		Situation is back to April 2008 levels. Main source of income are daily wage labor and remittances. Large households (8.5 members).

Zone (district)	Situation Report	Immediate/ Underlying causes & Recommendations	Outlook October - January	Baseline information
15 (Vahdat, Fayzobod, Varzob)	44% of the population is food insecure out of which 9% severely: around 157,000 people	The **return of migrants with remittances** (confirmed by both households and KI) explains the improvement of conditions in this zone that remains vulnerable due low food consumption, bad access to food (**most households depend on migration** – 1/5 - and use it as a coping strategy). Moreover, **half of the households report not having recovered from previous shocks** and a high number of them use negative coping strategies such as consuming seeds and selling assets. Key informants also continue to report a **worsening of the situation mainly due to high food prices**. For the near future, households do not possess much food stocks (only ¾ of them and low duration) and farmers report **less planting than average** mainly due to fear of locusts and crop failure again this year. 2/3 of the households continue to contract long-term debts to buy food and feed. **Livestock situation is also worrisome** as ½ of the households reported losses (due to diseases) and lack of feed and shelter for the winter. Good winter conditions mitigated further losses. This zone should be supported during the lean season and closely monitored.	→	In April 2008, the zone was considered moderately food secure and in October severely food insecure due to shocks (locusts and crop failure). Households depend highly on remittances. Lack of education of household head and lack of agricultural assets confirmed in previous rounds.
16 (Gafurov)	44% of the population is food insecure out of which 9% severely: around 157,000 people	Most households still rely on agricultural wage labor, crops, government salaries and remittances and **depend mainly on the market** for accessing food. But high prices and limited access to water for agriculture remain the main shocks affecting households. The slight improvement in the food security conditions of the households is mainly due to the **return of migrants** from Russia confirmed by both key informants and households. Also, households have benefited from regular remittances over the past three months. Nonetheless, this **zone remains a priority** as food consumption is still quite low, stocks insufficient and ¼ of households reported loss of livestock due to diseases and cold winter. The outcome of the coming months will mainly depend on the flow of remittances and migration to Russia.	→	This zone was already identified as a priority zone in April and October 2008. It also has the highest level of non-educated heads. This is the only zone were unemployment and loss of salary has been constantly reported. High prices remain the main difficulty faced by people.
7 (Hamadoni, Farkhor, Panj, Vose)	40% of the households are food insecure (9% severely): 172,000 people	**Unemployment**, high food prices and reduced drinking water, harvest failure and human diseases remain the main problems of the households in this zone. Most of these problems are chronic. This round confirms that most households use a **high number of negative coping mechanisms** to face these shocks (Coping Strategy Index is one of the highest). Although migration is not reported as a coping strategy, both households (31%) and key informants report an **increase in migration** over the past three months. This strategy does not seem effective in the long term as those who recently returned came back without remittances, 64% of the households receive **irregular remittances** that in turn amount for low proportion of total income. The lack of stocks in October, high food prices (confirmed by traders) and dependence of households on the market have contributed to reduce food consumption of most households.	↓	Most households get food from the market. Main source of income: daily wage labor and government salaries. High number of indebted households confirmed.
3 (Panjakent)	39% of households interviewed are food insecure (6% severely: 45,500 people	**Loss of livestock** (due to increased number of diseases), **reduce salary of family member** (especially remittances), **high prices and cold** weather have reduced household food security situation in this zone. 33% have fallen into moderately food insecure category as a result and have not recovered from these shocks. **Food consumption has decreased but access to food remains the main constraint** to adequate and healthy diet: 20% of households have had to take their children out of school at some point in the last three months due mainly to lack of money. Also, in April and October, household could count on their own production which was not the case over the past 3 months.	↓	Results place this zone in a worst situation than in April and October 2008. Main sources of income are remittances and livestock. Low dependency on market.

Zone (district)	Situation Report	Immediate/ Underlying causes & Recommendations	Outlook October - January	Baseline information
		Increase of expenditures on fuel and transport might also explain the decrease in food consumption. The situation might remain the same until the harvest especially if remittances cannot help mitigate impact of current shocks.		
4 (Asht)	42 % of the households surveyed are food insecure (around 34,000 people) out of which 6% severely	Reasons for high food insecurity in this zone remain similar to the ones identified in October: the **level of remittances received continues to drop** (despite an increase of return) and apart from households with government jobs, the others have difficulties providing for their basic needs. The **dependence on market and the high food prices** make for most of the problems in this zone. This is the only zone were the **bankruptcy of family business** was reported as a main shock. As identified in October the migrants returning from Russia have caused increased pressure on already vulnerable households. Stocks and ownership of livestock are confirmed as low. In the coming months, situation will not improve unless external assistance is provided. Providing water for agricultural purposes should also be a priority.		Main income remains daily wage labour and remittances. High dependence on the market. Low ownership of livestock.
Moderately Food Insecure Zones (less than 34% of overall food insecure households – including severe and moderate food insecurity)				
2 (Mastcho)	30% are food insecure (12% severely) and food insecure population is estimated at 23,000	**Return of migrants, food assistance and good stocks have helped households** to go through the past three months without further deteriorating their food security. Food consumption remains at similar levels as in April and October. Good ownership of livestock also helped reducing the use of negative coping strategies used by households to face their main problems: **reduced drinking water and high food prices**. Water is not only a problem for consumption (50% of households use an unprotected well) but also for agricultural purposes. Solving this issue would help increase income coming from daily wage labor which is one of the main activities in the zone. Therefore, over the next months, assistance should focus on maintaining good food consumption but also on improving access to drinking water and irrigation.		The survey confirms the trends and livelihoods observed in April 2008. Food insecurity was higher in female-headed households and around 10% of the interviewed are in this situation.
10 (Rasulov, Istaravshan, Gonchi, Spitamen, Shakhristan)	30% of households interviewed are food insecure (12% severely). Estimated affected population: 159,000	Results of this round show **more households are food insecure** as previously especially those in severe food insecurity. As described in October, most households rely on field crops, agricultural wage labor and remittances for a living but recurrent harvest failure cited by households (25% in October and 25% again this round) forcing **20% of the households to rely on begging**/borrowing food from relatives and 51% to contract debts to buy food and feed (large amounts were borrowed). **Loss of livestock** might have also contributed to the deterioration of their situation. Moreover, most households had not recovered from previous shocks and key informants confirm that the **communities are facing more problems than last year** mainly due to lack of rain. Households have embarked into using negative strategies and especially women as 1/3 restrict their daily food consumption. If the increase of rainfalls does not contribute to minimize the effects of the shocks, the situation is not likely to improve in the next three months. Assistance in agriculture and water is required in this zone.		High percentage of households with 2 or 3 income sources. Households relying on field crops such as wheat and potato.
13 (Tavildara, Nurobad, Ragun)	Around 14% of the population is considered food insecure out of which 3% severely. 13,200 are food insecure	The situation in this zone remains fairly good: households are found to have a **good diet**, few report worsening of their economic situation, migrants have returned with remittances, many own livestock (sheep/goats and poultry) and have a low CSI**. Food stocks also remain among the highest** of the sample and low dependence on the market for food is confirmed. These factors contribute to improve food security status. Nonetheless, households reported **planting less** and		Since April 2008, the zone has constantly been in this category mainly thanks to high ownership of livestock, good stocks and low dependence on markets.

Zone (district)	Situation Report	Immediate/ Underlying causes & Recommendations	Outlook October - January	Baseline information
		many still **borrow food or purchase it on credit**. High food prices continue to drag households into food insecurity and **water and crop and pest diseases** remain major concerns.		
14 (Gissar, Shakrinav, Tursunzade)	6% severely food insecure and 12% moderately. Estimated food insecure population: 130,000	Situation remains similar to October. This could be due to an **increase in food stocks** (especially flour) **and in the ownership of livestock** especially sheep/goats. High dependence on the market is confirmed but seems reduced as a higher portion of households reports own production as main source for food. The main source of income remains employees/salaries (34% of the households). No increase has been noted in migration and key informants confirm return of migrants. But migrants were said to come back without remittances in a zone where **1/5 of the households depends on remittances**. Results show high participation of women in income-generating activities. Stocks should help households going through the lean season and a good harvest should help in maintaining current food security status (farmers reported increase in planting).	→	This zone is confirmed as a moderately food insecure one. Most indicators are confirmed since April 2008: low level of education, low ownership of animals, good food consumption. Main problems revolve around water, crop failure and high food prices.
18 Dzhilikul, Rumi, Vakhsh, Sarband, Bokhtar)	17% of the population is food insecure, out of which 7% severely. A total of around 89,000 people could be food insecure	Recent assistance programs in this zone and recent return from migrants with remittances (despite a decrease reported) might have helped improving conditions of the households. Households have also managed to put together **good and long duration stocks**. Like in most of the zones **water and health problems are still a major concern** for households and prevent them from escaping chronic food insecurity and also affect their livestock. Some households are still surviving on begging and borrowing from relatives. In the next months, assistance should continue but **until the next harvest the situation could deteriorate if remittances continue to decrease** as households do not own many assets to cope with their difficulties (few livestock). Purchase of food on credit will continue and long-term effects of lack of water and reduced health expenses might bring new problems to households already facing more problems than last year. Long term development schemes, especially related to job creation, are needed.	↑	Unemployment and chronic economical difficulties have been reported again in January 2009.
1 (Shartuz, Khusrav, Kubodiyon, Kumsangir)	19% of households interviewed are food insecure. Estimated affected population: 78,000	Households in this zone still **highly rely on remittances** (almost half declare remittances as their main source). Money transfer has helped households since April to slightly improve their food consumption. But in the current economic context, this livelihood might prove harmful as out the 46% of households receiving monthly remittances already **2/3 claimed that remittances have decreased** over the past three months. The economic downturn in Russia has forced many households already highly dependent on the market to buy food on credit. This might in turn explain the relatively **low food stocks**. Less planting of wheat might also add to these problems. Some households have already started to use very negative coping strategies as this zone has the highest percentage of households reporting to frequently skip meals for a whole day. But CSI is overall low and households can rely on strong ownership of healthy livestock.	↑	The situation improved from 22% severely food insecure in April 2008. Survey confirmed large size of families, low level of education for female head of households and high dependence on migration/remittances. Main problems: high prices and drinking water.
12 (Kanibadam, Isfara)	23% of food insecure (3% severely) for an estimated total of 62,000 people	Deterioration of food security in this zone might be due to **reduced food availability** during the winter months as households maintain **good income sources and ownership of animals** (especially sheep/goats). But stocks stay at low levels and remittances have increase together with migrants' returns. Many households have still not recovered from their main shocks. Apart from high prices, households indicated **increase in human diseases and reduced water quality** as main shocks. As most households rely on stable income sources, the situation might change mainly for those	→	Many households with 2 or 3 income sources. Heavy reliance on remittances.

Zone (district)	Situation Report	Immediate/ Underlying causes & Recommendations	Outlook October - January	Baseline information
		depending on agriculture (and therefore water) and remittances (although still cited as regular).		
17 (Gharm, Tojikobod, Jirgatol)	11% are moderately food insecure. None are severely food insecure. 20,000 people food insecure	**Few households relied on remittances** in the past three months but key informants and households confirmed an **increase in migration** and low return of migrants. Main income still mostly comes from the production and sale of field crops. But farmers have reported **planting less than last year** and an increasing number of households have taken debts (37%) to buy food for fairly long periods and large amounts. For the coming months, **food security will mainly depend on the coming harvest and availability of water** as main shocks reported still mainly relate to lack of water. The livestock (high ownership of sheep/goats and poultry confirmed) seems healthy and ready for the winter and this should also help households staying fairly food secure and confirming increase of food consumption score.		Members of households migrate primarily for studies abroad, strong ownership of livestock and good food stocks. High percentage of per capita expenditures. Food mostly coming from the market.
6 (Murgab, Shughnon)	Very few food insecure household in this zone: 3% moderately. 2,500 people food insecure	The good food security situation in this zone is once more confirmed by a fairly good food consumption, a very low CSI, a high ownership of livestock (with very few losses), **low percentage of households taking new debts** and of food coming from own production and **good food stocks**. 83% of expenditures over the past three months went to food and 10% went to fuel expenditures. Regarding migration, **34% of households still depend on remittances** as a main source of income and few returns of migrants were noted over the past three months. The **decrease in the level of remittances received is confirmed** and the frequency is also more irregular. In the short term, the food security situation in this zone should not vary much in the continued absence of main shock. The only major change could come from a significant decrease in remittances sent by migrants settled in Russia and Dushanbe.		Large number of sheep/goats owned. Medium dependency on market. Small businesses well developed. Main shocks are high prices and earthquakes. High consumption of meat and milk.
11 (Ayni, Kukh. Mastcho)	Very few food insecure household in this zone	**Few households reported worsening of their economical situation in this zone**. Households are still able to rely on field crops and high ownership of livestock. Dependence of remittances is not as high as in other zones. Stocks are still among the best of the whole sample. Most of the problems faced by the households are the same as last year (high prices, landslide/ avalanches/ floods). Key informants confirmed return of migrants in the past three months to help in the fields (no respondent reported out-migration). To face main issues, households purchased food on credit but very few of them actually contracted new debts (14%). Households and farmers interviewed reported **less planting of wheat, potatoes and vegetables** than last year. This might impact households' food security in the coming months. Assistance in reducing impact of natural disasters is recommended.		Food security remains at acceptable levels in this zone where households mostly rely on their own production.

The arrows indicate the overall change in situation between round 1 and round 2 and take into account all indicators surveyed. Increase or decrease is subjective and not statistical representative.

[i] Emergency Food Security Assessment in Rural Areas of Tajikistan (EFSA), A Joint Food Security, Livelihoods, Agriculture and Nutrition Assessment, April/May 2008.

[ii] UNICEF's The Multiple Indicator Cluster Survey, MICS, Tajikistan 2005

[iii] Cattaneo A, Child nutrition in CEE and CIS countries: report of a situation analysis, 2007.

[iv] A Study of the Nutritional Status of Children aged 6 – 59 months, and reproductive Women in four Regions of Tajikistan (NNS), 2006

[v] D'Acapito P, Consultancy activity to carry out a field test of linear programming for optimization of complementary feeding in Tajikistan, Tajikistan, July-August 2005. WHO/UNICEF-Report, 2006. Unpublished Report

[vi] Micronutrient Status Survey in Tajikistan (MSST), 2003