

EARLY WARNING INDICATORS, TAJIKISTAN (Update as of 18 December 2008)

Please find update on five “Early Warning Indicators” received from different sources and compiled into one document by REACT Secretariat (UNDP DRMP). For any questions or suggestions please contact **REACT Secretariat** on react.dushanbe@undp.org

I. Precipitation

Data source: Hydro-Meteorological Agency of Tajikistan

Warning trigger: Precipitation in some areas is less than 80% of average

Locations	Rainfall, in mm March to Nov. 2008	Norm	% of norm
Dushanbe	269.8	427.3	63
Kurgan-tube	128.6	166.6	77
Khujand	95.1	118.8	80
Khorog	121.6	168.8	72

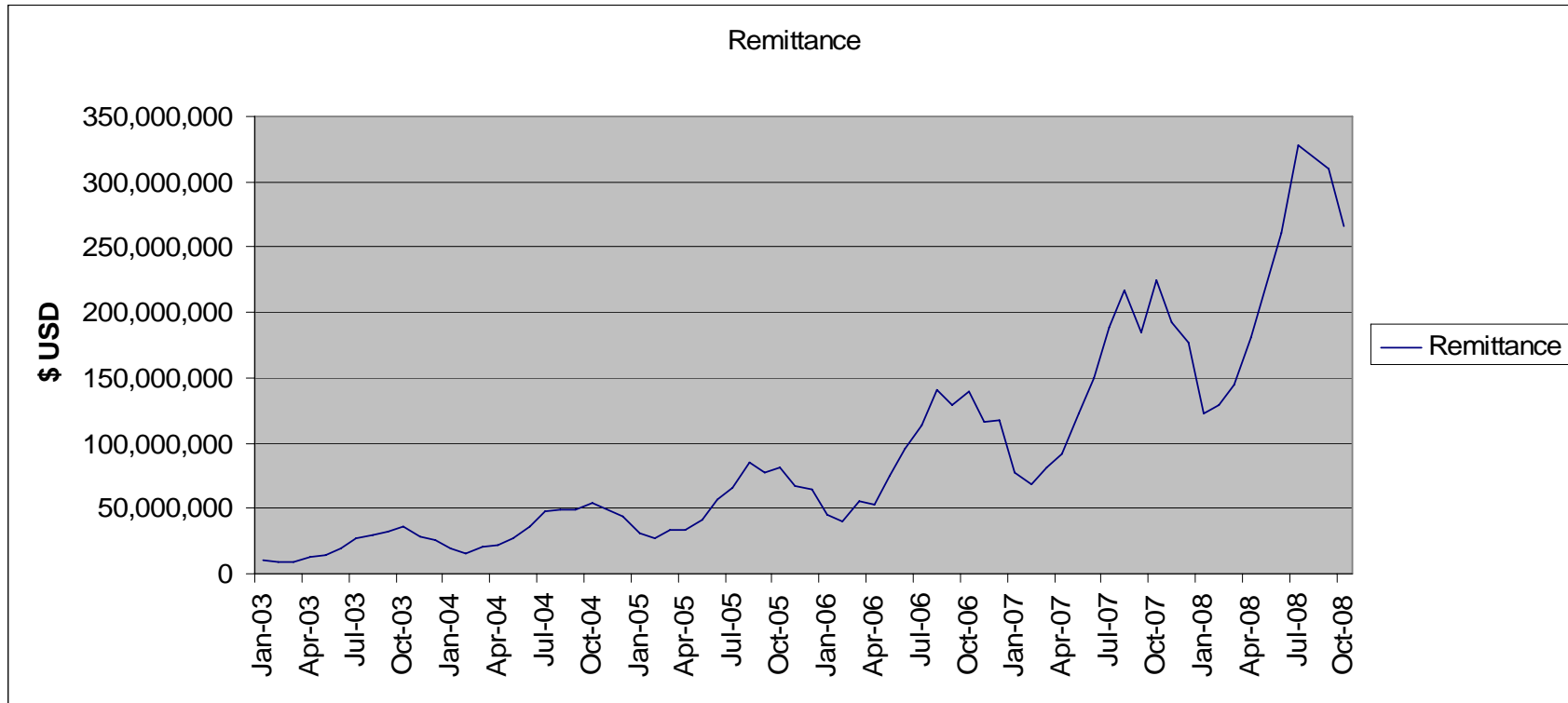
Interpretation of data on precipitation

- Precipitation in four regions of Tajikistan has been less during 2008 for 20-47% of long term average levels;
- The lack of precipitation has multiple effects on agriculture and water levels in the rivers for vegetation as well as non-vegetation periods;
- During the vegetation period (April-September) agricultural areas (specifically Khatlon and Sughd), where precipitation was less 25-46% this year, the rain fed areas suffered from draught;
- Low water inflow into the rivers and reduced water level in Nurek reservoir (compared to 2007) has largely been due to lower precipitation;
- Further monitoring of drought impact (as well as impact of assistance provided – agricultural inputs) is required.

II. Remittances

Data source: International Monetary Fund

Warning trigger: Drop in remittances greater than average for the last three years for September to October period of 2008



Month	Amount (USD)					
	2003	2004	2005	2006	2007	2008
January	9,947,028.6	19,650,552.0	30,580,174.4	44,745,089.40	77,062,738.4	122,491,287.8
February	8,841,873.3	15,382,058.7	26,843,335.6	39,774,537.80	67,843,279.2	129,249,750.8
March	9,663,205.8	20,831,802.1	33,872,291.6	55,090,884.30	81,111,667.7	145,281,637.8
April	12,415,990.9	22,129,324.2	33,204,166.8	53,475,380.90	91,126,152.8	180,807,302.1
May	14,617,779.8	26,636,574.5	41,591,560.2	75,479,204.20	123,108,365.7	220,317,672.3
June	18,934,591.5	35,560,629.4	56,271,591.6	95,959,864.40	149,896,380.0	261,434,595.6
July	27,071,228.1	48,047,341.5	65,802,818.5	114,225,357.50	188,505,625.6	328,077,889.5
August	29,169,547.6	48,962,608.2	84,726,082.5	140,968,970.30	216,828,566.0	318,550,818.8
September	32,299,430.8	48,647,695.3	77,073,495.5	128,776,774.60	184,100,779.8	309,730,577.8
October	36,147,835.8	54,478,185.9	81,254,550.2	139,975,830.00	225,222,261.2	266,266,586.0
November	28,129,830.6	48,869,116.5	67,707,880.6	116,527,658.00	192,062,612.5	
December	26,426,319.7	44,293,563.7	65,044,458.1	118,132,063.30	177,253,699.0	
Total	253,664,662.4	433,489,452.0	663,972,405.6	1,123,131,614.70	1,774,122,127.9	2,282,208,118.50

Interpretation of data on remittances

- Total amount for 2008 is the highest. The increase in remittances for 2008 is most likely due to overall increased number of migrants leaving Tajikistan. Highest pick for remittance inflow had so far been October month. In 2008, remittances have been steadily falling starting from July. Such decrease can be explained by the impact of the financial crisis on the economies of Russia and Kazakhstan, mainly affecting the construction industry;
- Data received from the national Agency on Social Protection (Ministry of Labor and Social Protection) indicate 94% of Tajik migrants travel to Russia for temporary employment. Media reports indicate a significant downturn in construction boom in Russia, migrants going out to streets demanding payments/salaries from construction companies;
- The seasonal work started to turn to cyclical work.

Concerns:

- Russia announced 50% decrease of quota for migrants for 2009 (including for Tajiks);
- People may seek alternative employment opportunities in Tajikistan (agriculture sector), or increase in illegal migration to Russia.

III. Food prices

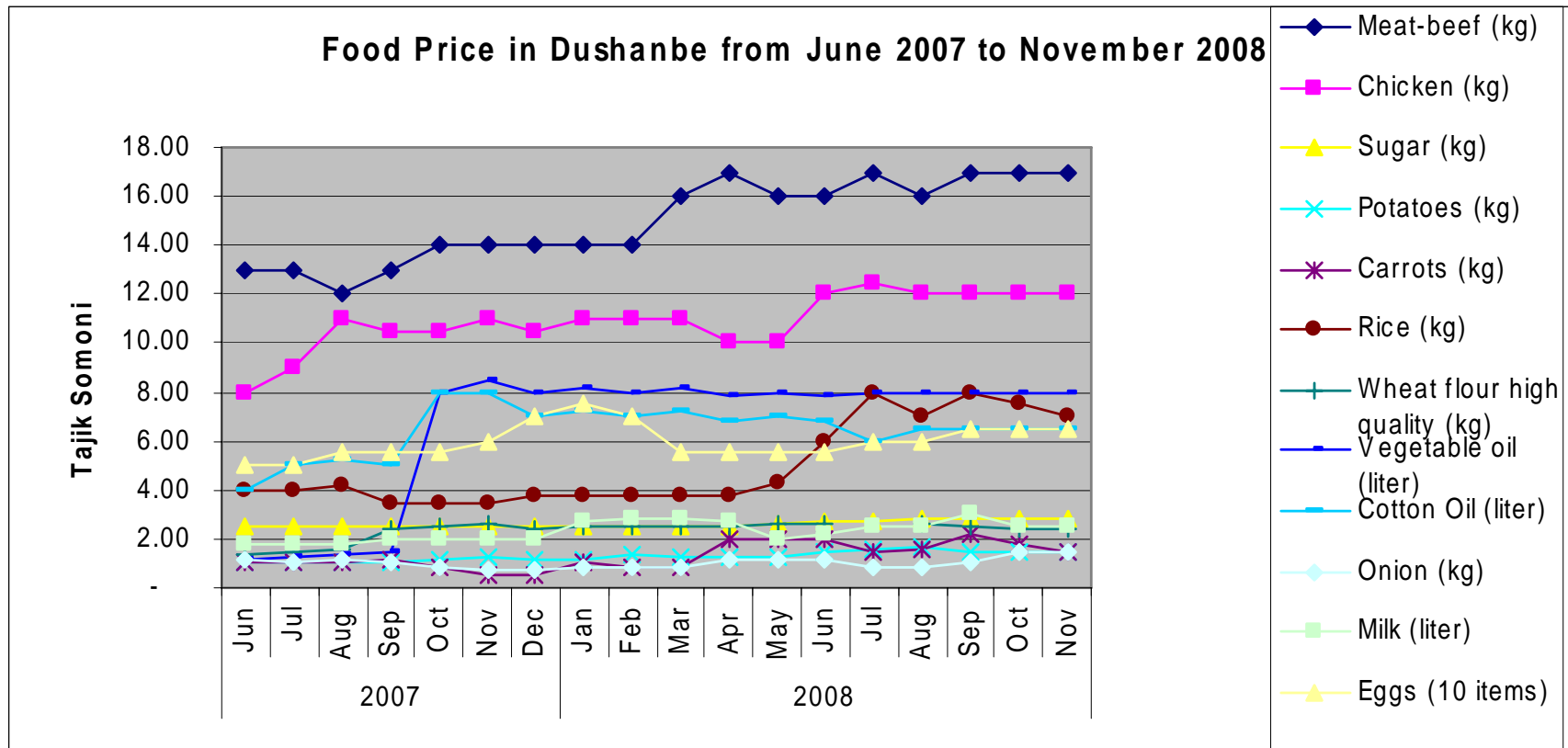
Data source: United Nations World Food Programme

Web link - http://www.untj.org/files/FSMS/documents/Market_Prices_2002-2008.xls

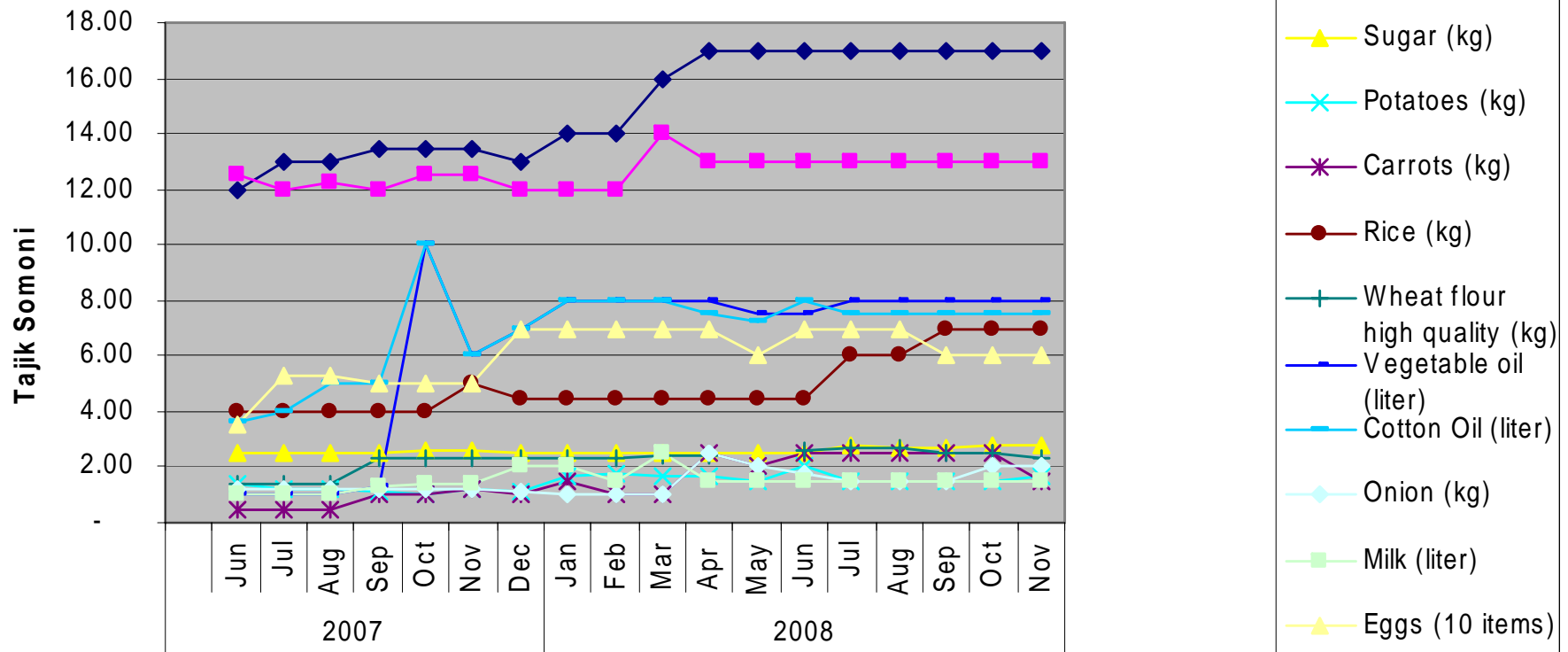
Warning trigger: The price for food remains high or increases (while oil prices decrease)

Interpretation of data on food prices

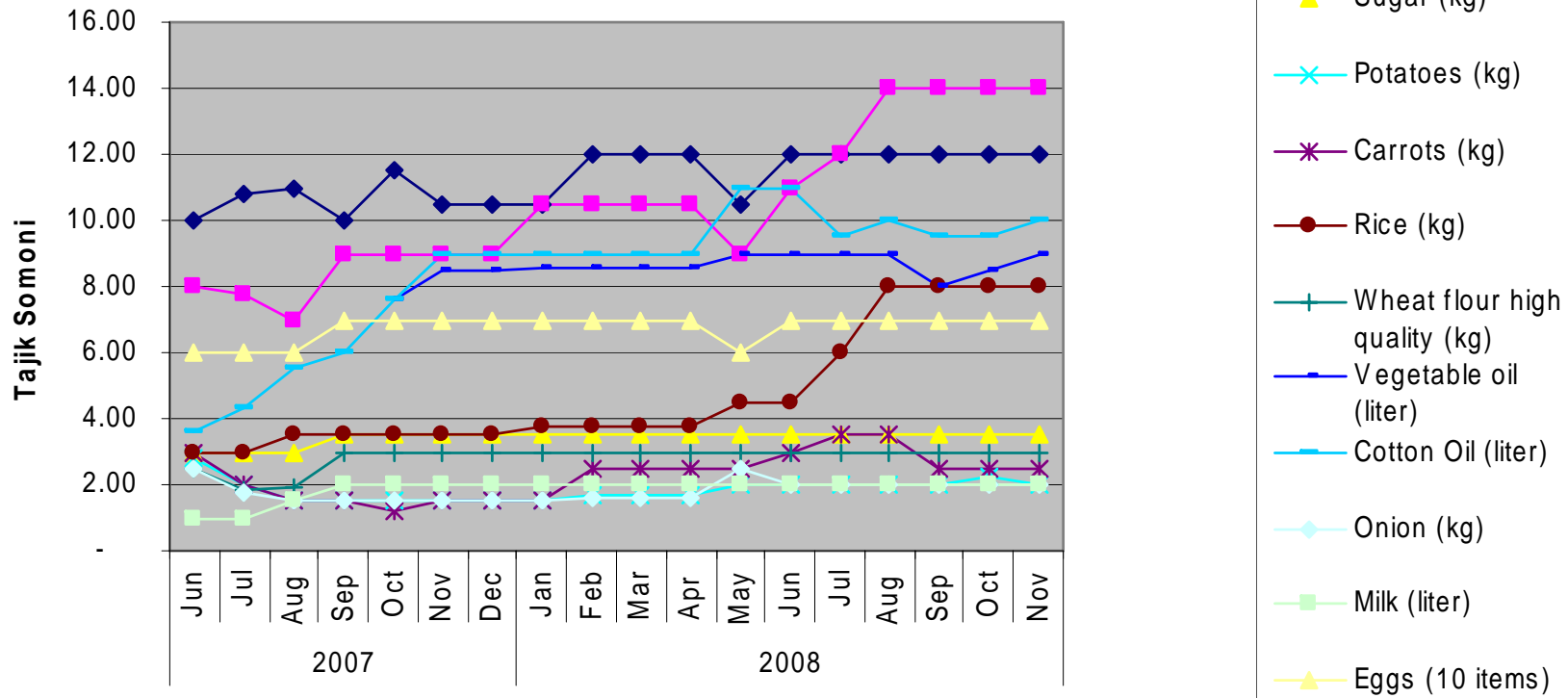
- Increased fuel prices in July 2008 (following global increase of oil prices) resulted in increased prices for imported basic food commodities;
- Food price has been fluctuating differently in different regional markets in Tajikistan.
- Slight impact (decrease) on some commodities due to global decrease in oil/fuel prices. Even though global oil prices went down in August-September, the price in regional markets remained high. This tendency of relatively stable high price could be linked to cash inflow in a form of remittances from abroad (mainly Russia), which motivates the buying capability and thus the high food price;
- In 5 regional markets of Tajikistan, prices for meat, vegetable oil, cotton oil and rice remain high;



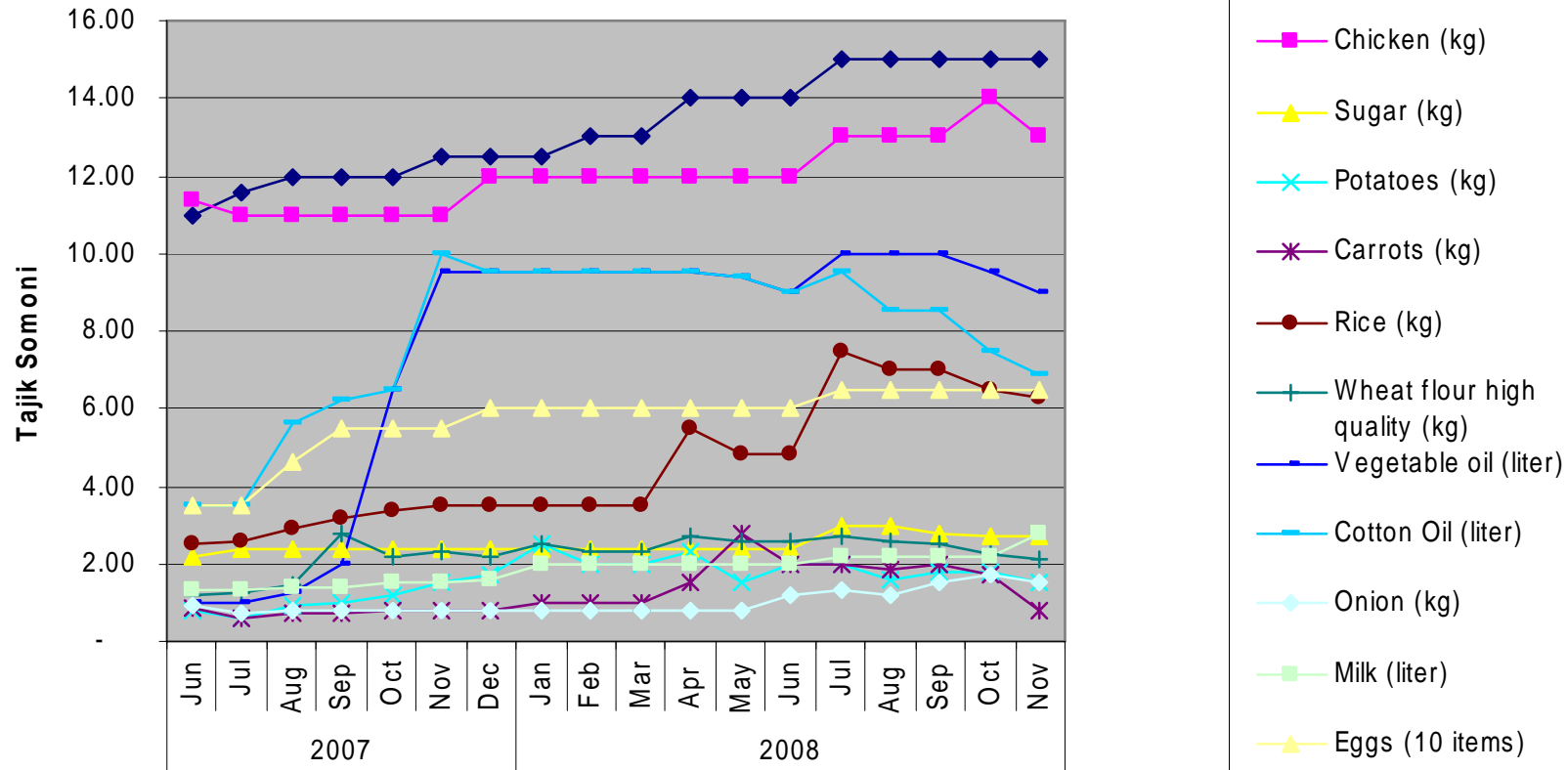
Food Price in Gharm district (Rash valley) for the period of June 2007 to November 2008



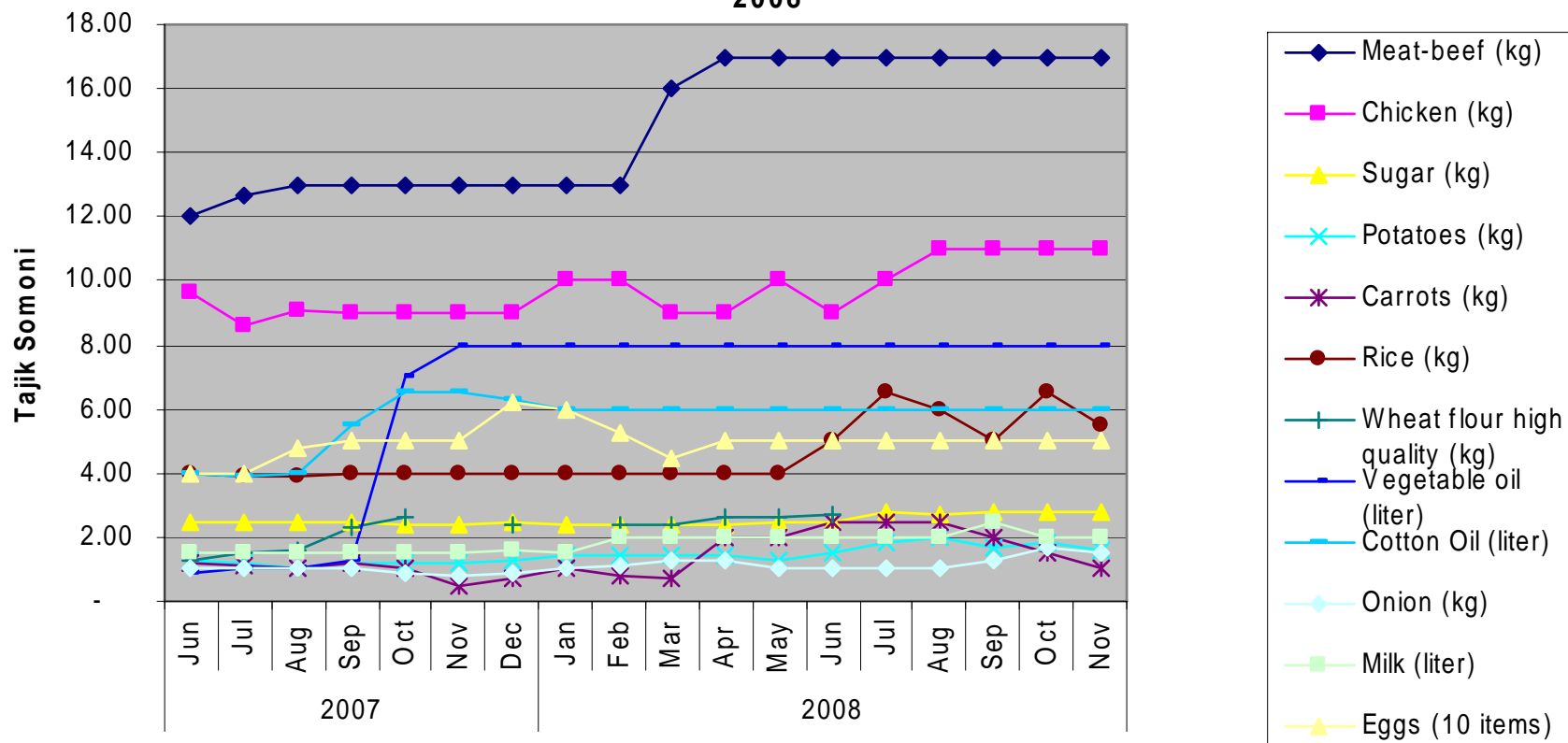
Food Price in Khorog city (GBAO) for the period of June 2007 to November 2008



Food Price in Khujand (Soughd Region) for the period of June 2007 to November 2008



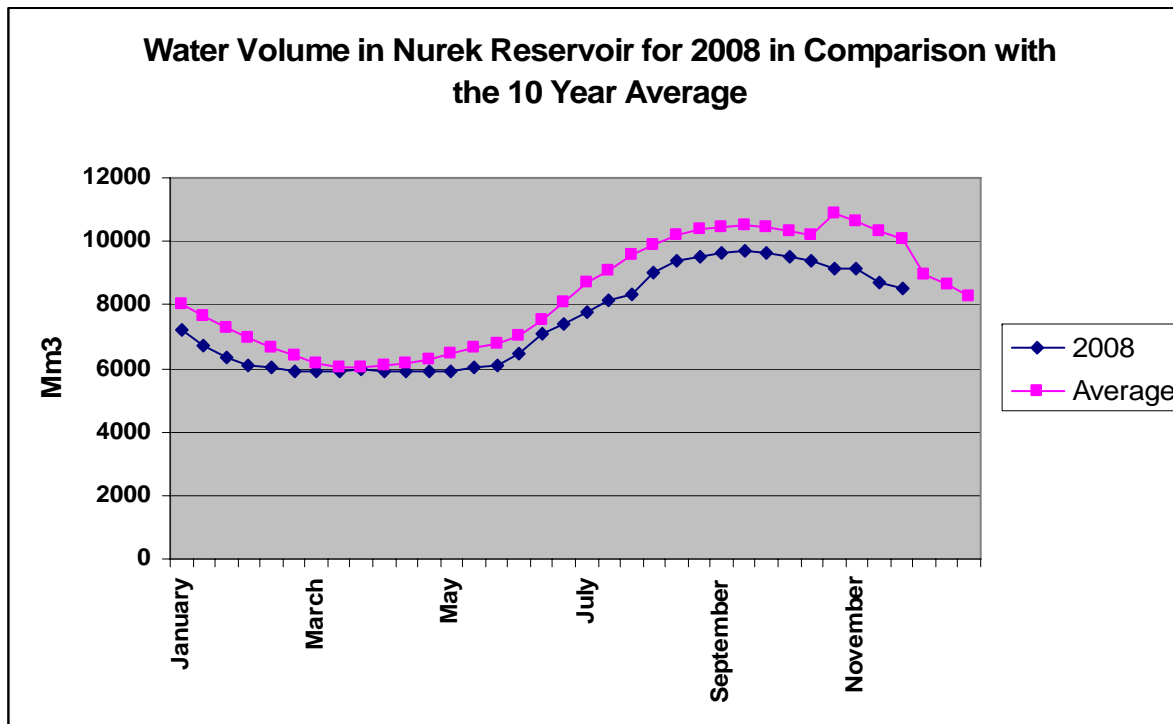
Food Price in Kurgan-Tyube (Khatlon Region) for the period of June 2007 to November 2008



IV. Water volume in Nurek Reservoir

Data source: Barqi Tojik

Warning trigger: Reservoir drops below 20% of historical average



Data on water volume in Nurek Reservoir for the third decade of each month in 2008

	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.
2008	6355	5927	5961	5896	6095	7378	8306	9530	9615	9156	8493
10 yr Average	7297.2	6376.1	6052.8	6308.2	6757.1	8109.2	9564.6	10385.5	10429.4	10878.6	10069.6
% of Average	87.09%	92.96%	98.48%	93.47%	90.20%	90.98%	86.84%	91.76%	92.19%	84.17%	84.34%

Interpretation of data on Nurek volume is combined with electricity generation data.

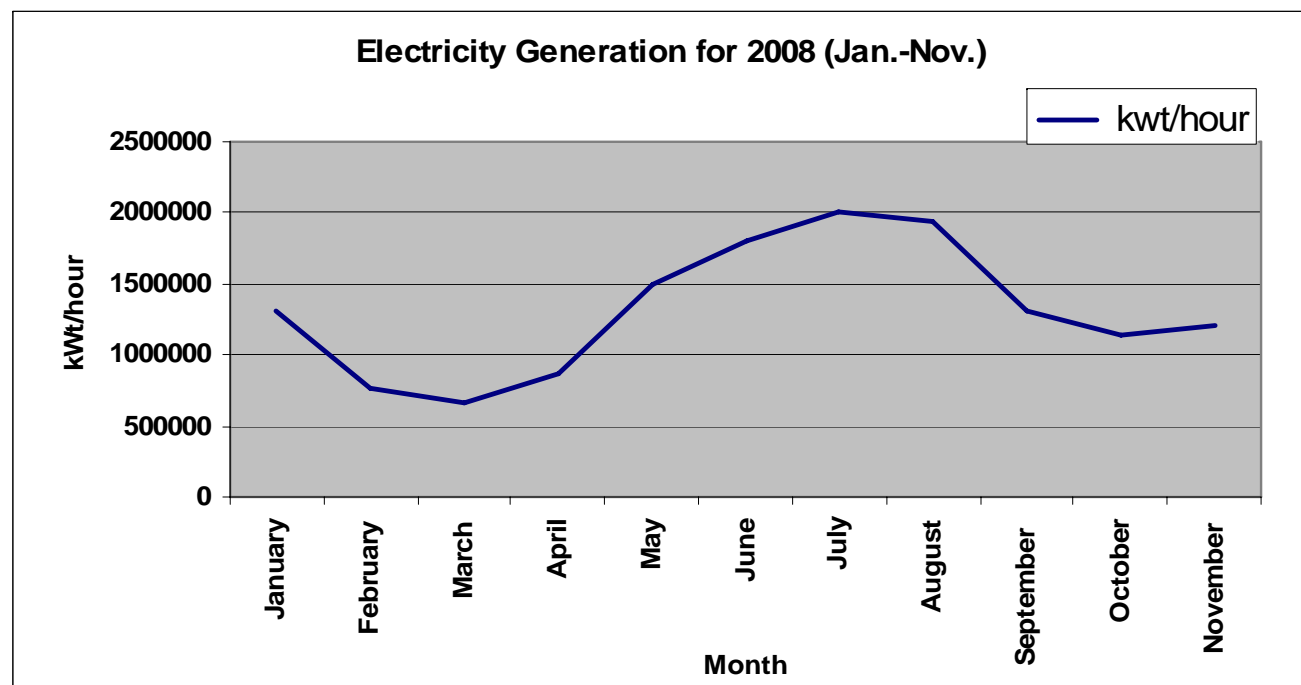
V. Electricity generation in Tajikistan

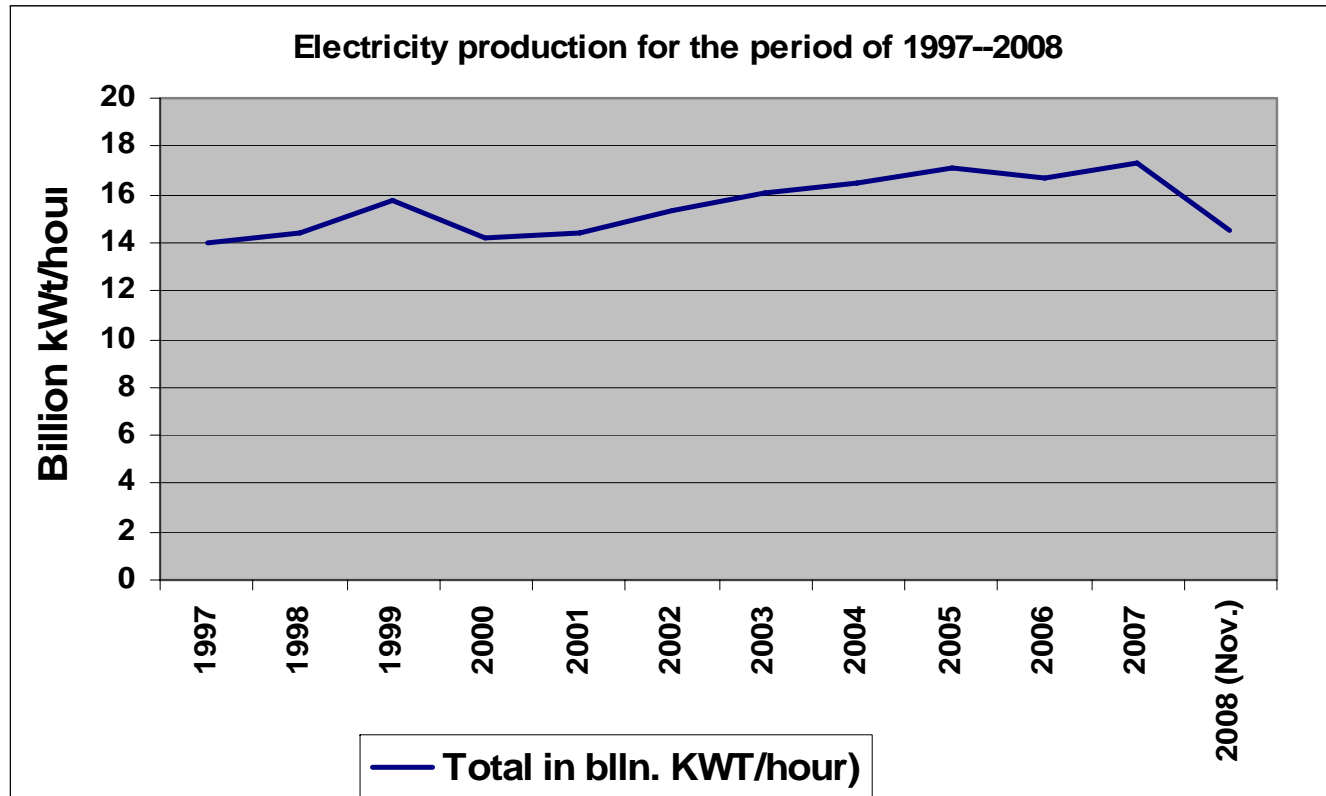
Data source: Barqi Tojik

2008	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Total
kwt/hour	1,311,068	767,803	656,180	865,596	1,494,037	1,810,852	2,004,306	1,941,083	1,308,146	1,138,293	1,210,678	14,508,042

Electricity Generation in Republic of Tajikistan for the past 11 years

Years	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Average 11 years	2008 (until Nov.)
Total in bln. KWT/hour)	14	14.4	15.8	14.2	14.4	15.3	16.05	16.5	17.1	16.7	17.3	15.61	14.5





Interpretation of data on Nurek volume/level and electricity (generation/capacity)

- Less electricity generated in 2008 compared to previous years (05-07) due to lack of water in Nurek reservoir;
- Water level in Nurek reservoir for November was 1.89 meters less compared to same period in 2007;
- Government actions to increase/save water in the reservoir through restrictions, importing electricity/gas, mazut;
- Electricity imports from neighboring countries (especially Turkmenistan). Imports planned until April 2009;

Concerns:

- Despite plans to provide main cities with electricity without restrictions, distribution system is weak to handle demand during cold season (transformers burning out);
- Colder than average temperatures in January and February 2009 (e.g. same degrees as February 2007) may reduce supply from neighboring countries (Turkmenistan);
- Unresolved “gas imports” for 2009 issue with Uzbekistan (increase in tariffs);