

Risk Monitoring & Warning in Tajikistan

MONTHLY REPORT

FEBRUARY 2011





RISK TRENDS

NATURAL HAZARDS

In February a series of avalanches poured down on the Maykhoura area of the Dushanbe-Khujand highway (62 to 74 km from Dushanbe) with a paralyzing impact on traffic. In March, rains, mudflows and avalanches may result in natural disasters, with the Yakhsu and Kizilsu Rivers at risk from mid-March during periods of intense precipitation and warmer temperatures.

ENERGY SECURITY

January had the highest level of electricity production for any of the past 15 months, linked to the full operation of the Sangtuda-1 hydro-electric power plant (HPP), a Tajik-Russian joint venture. If the Sangtuda-2 HPP, built jointly by Tajikistan and Iran, begins producing electricity in September 2011, as planned, Tajikistan will be better able to address electricity needs next winter.

FOOD SECURITY

Wheat prices in Khorog and Garm remained at historically high levels in February 2011. Prices for wheat flour decreased slightly in Khujand and increased sharply in Kurgan-Tube and Dushanbe from January to mid-February and are at historically high level. **These historically high prices are a matter of concern for food insecure individuals in Tajikistan.** In response to the continued surge in food prices, the Government of Tajikistan released some of its food reserves to the market in February, aiming to curb further price increases. The Mayor of Dushanbe allocated some TJS 16 million (3.6 million USD) to allow for more food to be brought into the markets of Dushanbe. Local media reports on decrease in grain imports in January.

HEALTH

During the last nine weeks of 2011 there is a decreased tendency of the influenza type illness, based on reported “influenza like illnesses” cases, with little impact on the health system functioning. For the current season of 2010-2011, the peak of influenza type illness morbidity occurred during the second week of February.

MACROECONOMIC TRENDS

Inflation in January was 1.9% with an annual estimated rate of 11.2%. The main growth in prices in January was due to rising cost for food goods, (2.8%) and services (1.3%), while costs for non-food goods increased only by 0.2%. The growth in the food price index is linked to increased world prices on essential imported goods (grain, wheat flour, cooking oil, fuel) over the past months and seasonal products (vegetables).

Contents

RISK TRENDS.....	2
1. HAZARDOUS EVENTS	4
2. WEATHER CONDITIONS	4
2.1 Forecast for March 2011.....	4
2.2 Weather Summary for February 2011	5
3. ENERGY	5
3.1 Electricity Supply.....	5
3.2 Electricity Availability.....	6
3.3 Natural Gas & Coal.....	6
3.4 Reservoir Levels	7
4. FOOD SECURITY	9
4.1 Food and Fuel Prices	9
4.2 Fuel Prices.....	10
5. HEALTH.....	10
6. ECONOMIC TRENDS	11
6.1 General Trends.....	11
6.2 Inflation	11
6.3 Population movement/migration	12
6.4 Employment and Wages	12
6.5 Wage Payment Arrears	13
6.6 Exchange Rate.....	13
6.7 Remittances	13
Annex A. Weather Forecast for March 2011.....	15

1. HAZARDOUS EVENTS¹

(A brief summary of potential and experienced natural hazard events in Tajikistan)

In February a series of avalanches poured down on the Maykhoura area of the Dushanbe-Khujand highway (62 to 74 km from Dushanbe) with a paralyzing impact on traffic, according to the Committee of Emergency Situations (CoES). More than 200 vehicles, mostly trucks, were trapped in the avalanches. Drivers and passengers were sheltered in special galleries and provided with emergency food and non-food items. The Ministry of Transport and Communication reported that bulldozers and other machinery worked throughout the month to clear the roads. Warmer temperatures will increase the risk of avalanches and people are advised by the Ministry of Transport and Communication to avoid unnecessary travels along the road.

Overview of Typical Hazard Events in Tajikistan During March 1992 to 2010	
Event	Number of Events
Heavy Rain	18
Earthquake	56
Avalanche	16
Flood	13
Landslide	25
Mudflow	53
Source: Information Management and Analytical Center, Committee of Emergency Situations	

In March, rains, mudflows and avalanches may result in natural disasters. In mid March flooding may occur in the Yakhsu and Kizilsu Rivers, with increased risk during periods of intense precipitation and warmer temperatures.

2. WEATHER CONDITIONS

2.1 Forecast for March 2011²

Average monthly temperatures in March will be 1 to 2°C below normal in all regions of the country. The warmest temperatures are expected during the second and the last 5-day periods in the month in Khatlon (18 to 23°C) and Sughd (16 to 21°C) Provinces. The coldest temperatures are forecasted for the first and the fourth 5-day periods in the month with temperatures -10 to -15°C in Western Gorno Badakhshan Autonomous Oblast (GBAO) and -17 to -22 in eastern GBAO.

Average temperatures by regions in March;

- Khatlon Province: 8 to 10°C
- Sughd Province: 7 to 9°C
- Mountainous Direct Rule Districts (DRD) and Western GBAO: 1 to -3°C
- Eastern GBAO: -8 to -15°C

Monthly precipitation totals are forecasted to be above normal in Khatlon (normal is 43-67 mm), Sughd (normal is 16-54 mm), DRD (normal is 70-148 mm) and western GBAO (normal is 18-93 mm) and below normal only in eastern GBAO (normal is 5-23 mm). The State Administration for Hydrometeorology forecasts further snowfall in Tajikistan in March.

(See Annex A for a more detailed forecast for March 2011).

¹ Data reported by Information Management and Analysis Center, Committee of Emergency Situations

² The information in Sections 1.2 and 1.3 and Annex A is based on reports from the State Administration for Hydrometeorology of Tajikistan.

2.2 Weather Summary for February 2011

The precipitation which fell in Tajikistan during February exceeded by 20 to 30 percent the average for this month over the past decade, according State Administration for Hydrometeorology of Tajikistan.³

Monthly average temperatures in most regions at lower elevations were normal, at higher elevations in Direct Rule Districts (DRD) and GBAO temperatures were 2 to 4°C above normal: at lower elevations 2 to 6°C, in foothills -1 to -2°C, at higher elevations -1 to -6°C, highlands -10 to -15°C.

The warmest temperatures were during February 1 to 4; 10 to 12; 14 to 18 and 21 with maximum temperatures at lower elevations 13 to 18°C, and daily average temperatures during these periods 3 to 10°C higher than long-term annual averages.

The coldest temperatures were during the third 10-day period in the month. Nighttime temperatures not higher than -2 to -8°C, and daytime temperatures 0 to 5°C. Daily average temperatures during this period were 4 to 8°C lower than long-term annual averages.

Precipitation in February occurred in Khatlon Province and DRD during 16 to 20 days, in Sughd Province during 12 days, in western GBAO during 12-14 days (Ishkashim 2 days), and eastern GBAO during 7 days.

3. ENERGY

3.1 Electricity Supply

Total power generation in January 2011 was 1,615 Gigawatts (GW) with average daily electricity generation of 52 GW compared to 46 Gigawatts for the same month in 2010. This is the highest level of electricity production for any of the past 15 months, and is linked to the full operation of the Sangtuda-1 hydro-electric power plant (HPP) a Tajik-Russian joint venture. Sangtuda-1 now contributes 14.4% of total hydro electrical production in the country. If the Sangtuda-2 HPP, built jointly by Tajikistan and Iran, begins producing electricity in September 2011, as planned, Tajikistan may be able to avoid extensive electricity rationing next winter.

Percent of Average Precipitation February 2011	
Location	%
Sughd Region	168-254
Khatlon Region	110-183
DRD	183-220
GBAO	114-322

Average Electricity Generation - Tajikistan November 2009 – January 2011 (Gigawatt)			
Year	Month	Nurek	Total for Tajikistan
2009	November	858	1,303
	December	866	1,414
2010	January	849	1,429
	February	825	1,382
	March	809	1,383
	April	824	1,267
	May	986	1,346
	June	975	1,331
	July	992	1,412
	August	938	1,388
	September	874	1,284
	October	731	1,180
	November	782	1,285
	December	935	1,556
2011	January	945	1,615

³ <http://news.tj/en/news/snowfalls-expected-tajikistan-until-early-march-avalanche-risk-remains-high>

In January a thermal power plant in Dushanbe started to operate with daily electricity generation 597 thousand kW. Total monthly electricity production in January from the plant was 18,508 thousand kW.

“Barki Tojik” (main national-level electricity supplier) announced the early end of winter electricity rationing than originally planned due to high water levels in reservoirs. This winter, Dushanbe and the provincial centers did not impose regular power cuts, while smaller towns had electricity for just 10 hours a day⁴

According to “Barki Tojik” and the Ministry of Energy and Industry, exports of electricity in January totaled 23.7 million kW with a value of 416,400 USD. Electricity imports in January were 18.0 million kW at total cost of 847,400 USD.

3.2 Electricity Availability

Average Daily Electricity Consumption – Tajikistan (April 2010 – January 2011) (Not including GBAO) Gigawatts					
Year	Month	South (Including TALCO and Dushanbe)	North	TALCO	Dushanbe
2010	April	35	7	18	6
	May	36	6.5	18.5	5.9
	June	35	11.8	18.2	4.5
	July	33	12	18	4.8
	August	33	12	18	4.8
	September	32	10	17	4.8
	October	32	5.9	17	5.7
	November	37	6.9	17	8.4
2011	January	44	8.6	17	12

The table at left shows the average daily consumption of electricity by major regions of Tajikistan and by the Tajik Aluminum Company “TALCO” (the largest commercial energy consumer).

Electricity consumption increased in January except for “TALCO”, where consumption has remained static over the past 5 months. As there was more capacity to produce electricity in January, it was possible for “Barki Tajik” to provide more

electricity to meet the demand for heating during the month.

3.3 Natural Gas & Coal

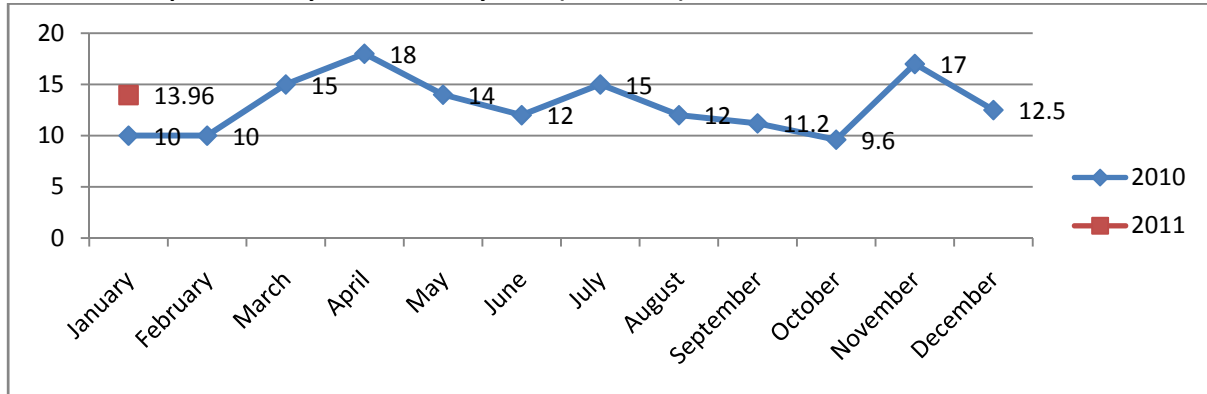
Natural Gas Imports in Tajikistan (2004 – 2010)

Year	2004	2005	2006	2007	2008	2009	2010	2011 (projected)
million m ³	622.5	629	635	644.7	512.7	216.7	156.3	180

⁴ <http://www.eurasianet.org/node/62933>

In January a total of 13.96 million m³ of natural gas were imported to Tajikistan (daily average consumption 438.5 thousand m³). Dushanbe received 890 thousand m³ of gas in January.

Natural Gas Imports January 2010 – January 2011 (million m³)



Coal production was four times lower in January due to weather conditions, making it hard to produce coal.

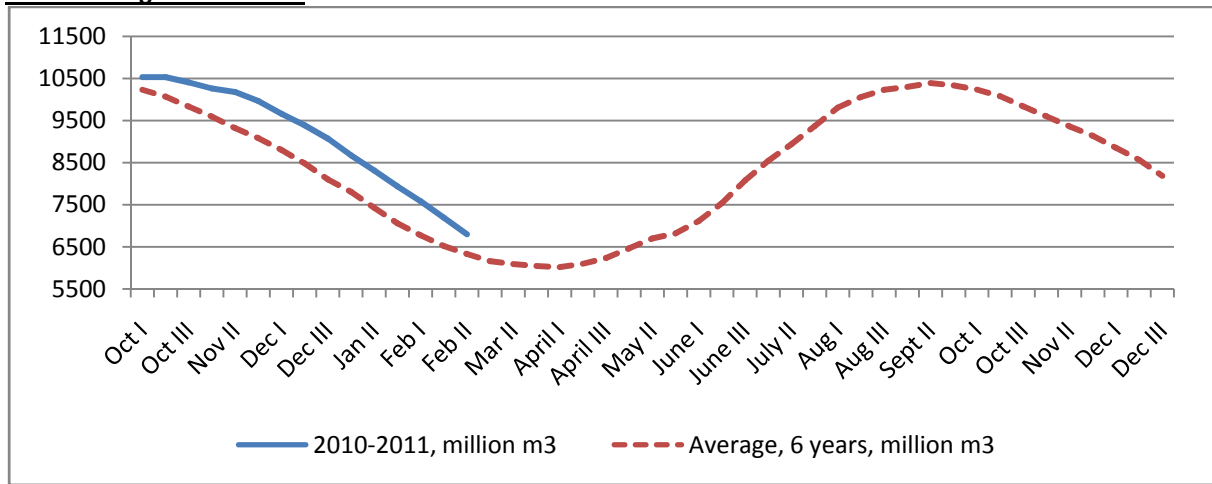
3.4 Reservoir Levels⁵

In January the water level in Nurek HPP reservoir decreased by 12.05 meters to the 882.61 meter mark.

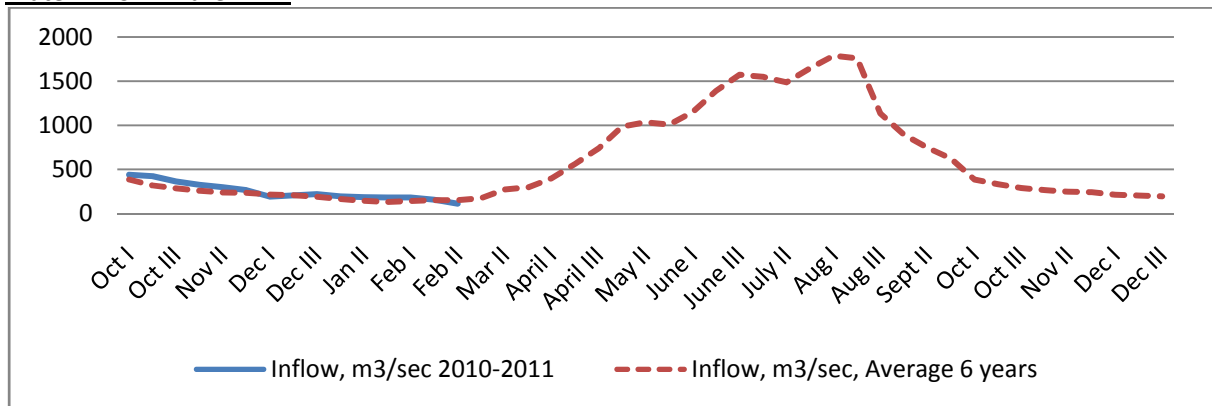
Total volume of the water in the Nurek HPP reservoir in late January (measured by water level in reservoir) was 7,939 million m³ (25.61 meter level). This water reserve will be enough for the rest winter and for April 2011 (an average of 8.5 meters of water is allocated per month).

The first chart below (**Water Storage – Nurek HPP**) indicates the volume of water in the Nurek reservoir as of late February 2011 compared to the 6 year average (2004-2010). The volume of water in the reservoir is above the 6 years average but significantly decreased compared to January 2011. The higher than average reserves in Nurek indicate a better than average capacity to generate electricity during the remaining winter months of 2011.

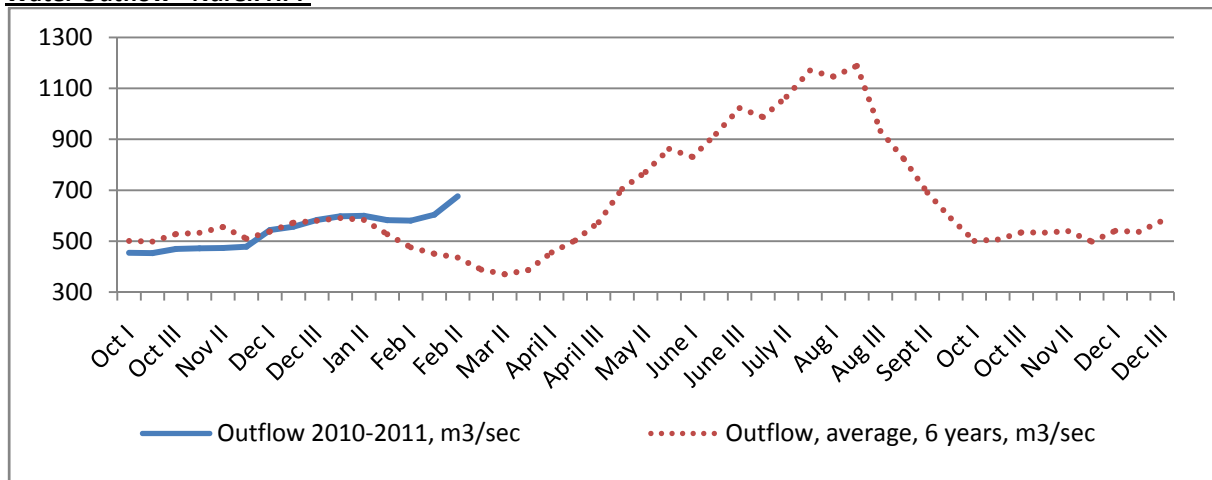
⁵ Data from CAWaterInfo, http://www.cawater-info.net/analysis/water/nurek_e.htm#

Water Storage - Nurek HPP

The second chart (**Water Inflow – Nurek HPP**) shows water inflows to Nurek. During the third 10-day period in February 2011, inflows dropped 38% compared to the water level during the first 10-day period in February, and the inflow was much below the six year average. This was due to sudden weather change and cold temperatures at the end of February.

Water Inflow - Nurek HPP

Despite decreased inflow, outflow in February increased by 93 m³/sec compared to the last 10 days in January 2011, a rate is much above the 6 year average. (See chart below.)

Water Outflow - Nurek HPP

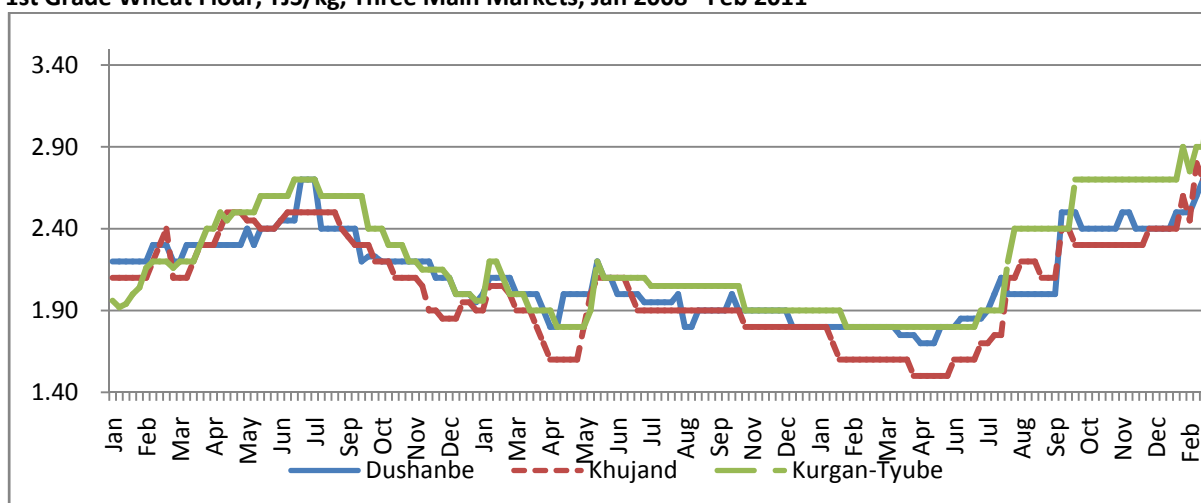
4. FOOD SECURITY

4.1 Food and Fuel Prices⁶

1st Grade Wheat Flour

The first table below shows prices for the 1st grade wheat flour in Dushanbe, Khujand and Kurgan-Tube from January 2008 to late February 2011. Prices for wheat flour decreased slightly in Khujand and rapidly increased in Kurgan-Tube and Dushanbe. These levels remain to be above or close the highest level since January 2008. Following sharp surge in food prices, the Government of Tajikistan released some of its food reserves to the market in February, aiming to curb further rise. The Mayor of Dushanbe allocated some TJS 16 million (3.6 million USD) to allow for more food to be brought into the markets of Dushanbe.⁷ Local media reports on decrease in grain imports in January.⁸

1st Grade Wheat Flour, TJS/kg, Three Main Markets, Jan 2008 - Feb 2011



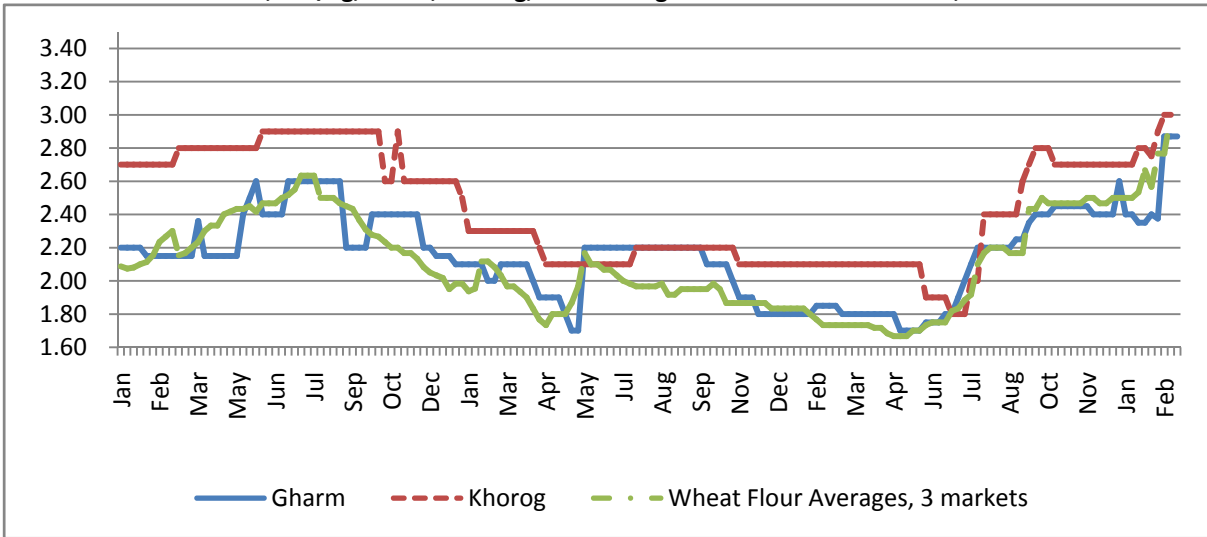
The following table provides prices for 1st grade wheat flour in two large regional markets, Garm and Khorog, together with the average price for the Dushanbe, Khujand and Kurgan-Tube markets. Wheat prices in Khorog and Garm remained at historically high levels in February. Prices in Khorog increased compared to January 2011 and equal to average in three large markets, while prices in Garm remained unchanged.

⁶ Food and fuel prices are from WFP Food Security Weekly Market Monitoring, Tajikistan

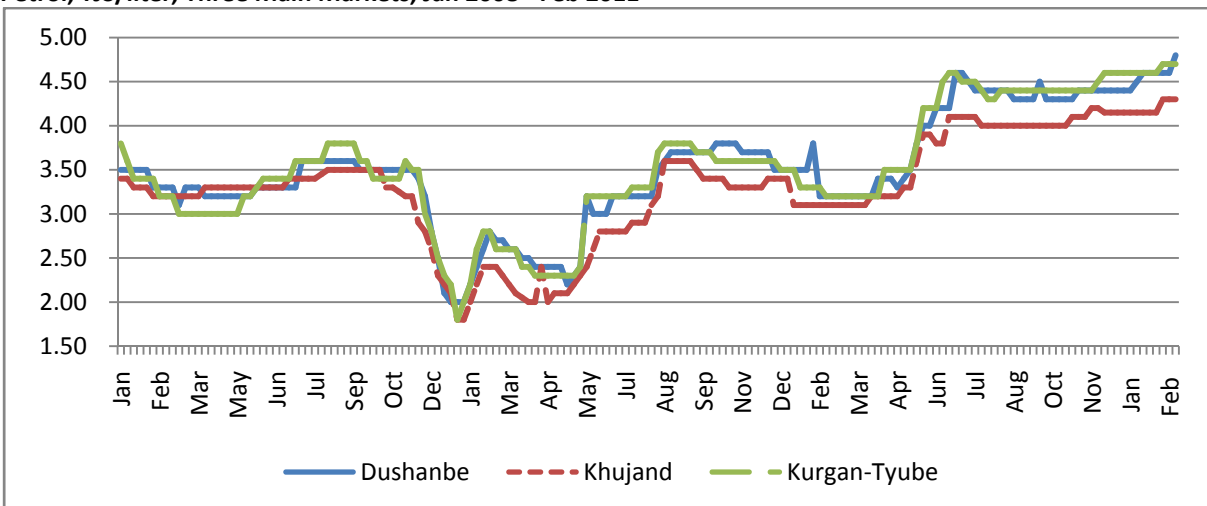
http://untj.org/country_context/coordination_mechanisms/agriculture&food_security/fsms/

⁷ FAO report "World Food Prices Reach Historic Peak Implications for Tajikistan", 22 February 2011

⁸ <http://news.tj/en/news/tajikistan-s-grain-imports-decrease>

1st Grade Wheat Flour, TJS/kg, Garm, Khorog, and average of Three Main Markets, Jan 2008 – Feb 2011

4.2 Fuel Prices

Petrol, TJS/liter, Three Main Markets, Jan 2008 - Feb 2011

Petrol prices in February increased in Dushanbe and slightly increased in Kurgan-Tyube. Diesel prices did not increase between January and February in all markets. In 2010, Tajikistan imported 630,000 tons of petroleum products, 93% from Russia and the remainder from Kazakhstan and Turkmenistan. In January 2011, Tajikistan imported 45,000 tons of petroleum products⁹.

5. HEALTH

The influenza situation appears to be declining and in a post-peak period based on the latest surveillance data. During the last nine weeks of 2011 there is a decreased tendency in influenza, based on reported 'influenza like illnesses (ILI)' cases, with little impact on health system functioning, and with mild clinical disease manifestations. During the current 2010-2011 season the peak of influenza type illness morbidity occurred during the second week

⁹ <http://news.tj/en/news/fuel-prices-continuing-rise-tajikistan>

of February. From January to March 2011, based on the scout epidemiological surveillance in the country, no fatalities have been attributed in lab confirmed influenza cases¹⁰.

6. ECONOMIC TRENDS

6.1 General Trends

As of January 1st, 2011, the Agency for Statistics in Tajikistan started to provide some economic indicators according to international standards. From now on, official Gross Domestic Product (GDP) data will be released quarterly, every 6 months, and yearly. However, analyses show GDP in January 2011 was 1.8 billion Tajik Somoni (405.2 million USD). The share of goods in GDP for January was 40.8%, and the share of services was 48.8%. At the same time the share of taxes in GDP remained almost unchanged at 10.4%.

Inflation rate continued to grow in January. The consumer price index in January was 101.9%, including food goods - 102.8%, non-food goods - 100.2% and services - 101.3%. The food basket per one individual in January increased by 5.8% (116.9 Tajik Somoni= 26.32USD) compared to December 2010. The cost of a food basket based on nutritional norms would have been 223.71 Tajik Somoni (50.37 USD).

According to the Ministry of Economic Development and Trade's (MoEDT) monitoring of wheat flour from Kazakhstan (supplier for 60% of Tajikistan market), in January prices increased by 3.9%. Prices for locally produced wheat flour increased by 1.7% (first grade wheat) and 3.6% (second grade wheat), due to world price growth of 5.2%. The MoEDT says the need in wheat is growing in Tajikistan every year due to growing population. The wheat requirement currently exceeds 1.6 million tons per year. Local cereals production has no capacity to meet the wheat needs of the population, with yearly imports of wheat and wheat flour from Kazakhstan at more than 600 thousand tons.

Prices for dairy products also increased in January by an average of 10-15% compared to December 2010. Prices for local beef meat also increased at not less than 5 USD per kg. This is 30% more than imported meat from India and Iran.

MoEDT says prices for food goods will continue to grow due increasing prices for cereals and fuel. The Government of Tajikistan released strategic reserves of wheat flour, buckle wheat and rice in local markets at prices below their market value. All these food products are part of the state reserve, which it was decided to sell in order to curb the growth of food prices.

Cotton exports in January 2011 doubled when compared to January 2010, which is linked to increased average price for cotton on foreign markets.

Foreign sales turnover in January 2011, including electricity and natural gas imports, was 381 million USD, which is 43.1% higher (114.7 million USD) than in January 2010 and 13.9% (61.3 million USD) lower than in December 2010. The sales balance in January had deficit 106.8 million USD. Foreign sales turnover with CIS countries decreased by 21.7% (44.1 million USD) and with far abroad countries by 7.2% (17.3 million USD).

The National Bank of Tajikistan reported total gold reserves of 663.5 million USD, 88.8% higher than last year.

6.2 Inflation

Inflation in January was 1.9% with an annual estimated rate of 11.2% The main growth in

¹⁰ Data from World Health Organization in Tajikistan

prices in January was due to rising cost for food goods,(2.8%) and services (1.3%), while costs for non-food goods increased only by 0.2%. the growth in the food price index is linked to increased world prices of essential imported goods (grain, wheat flour, cooking oil, fuel) over the past months and seasonal products (vegetables).

6.3 Population movement/migration

During January 2011 a total of 33,108 labor migrants left Tajikistan, compared to 39,045 in 2010.

Of the total departing migrants

- Men – 33,108 (2010 – 33,190)
- Women – 3,255 (2010- 5,864)

Means of transportation from

Tajikistan

- Air – 31,272 individuals (2010-33,216)
- Railway –1,836 individuals (2010 – 4,182)

Regional division:

- Dushanbe, Direct Rule Districts – 21,197 individuals
- Khatlon Province – 3,009 individuals
- Sughd Province – 8,902 individuals

Departures and Returns of Labor Migrants January 2011				
Region	Left	Returned	Left (%)	Returned (%)
Dushanbe, DRD, GBAO	21,197	27,283	64.02	66.5
Sughd	3,009	7,832	9.09	19.09
Khatlon	8,902	5,911	26.88	14.4
Total	33,108	41,026	100%	100%

In January a total of 41.026 individuals returned to Tajikistan; in January (?) 2010, 34,046 people returned.

- Men - 37,567 individuals (2010 – 30,190)
- Women – 3,459 individuals (2010 – 3,856)

Means of transportation to Tajikistan;

- Air –32,469 individuals (2010 – 4,896)
- Railway – - 8,557 individuals (2010- 2,120)

Data for migrants' departures are close to 2010. The general trend for labor migration in January is back to Tajikistan, as indicated by returns being 23% higher than departures. January is also the month of lowest remittances.

6.4 Employment and Wages

The Statistics State Agency reported 2,154,800 economically active individuals in December 2010. Out these individuals 97.8% are employed and the remainder unemployed.

(Update data will be available in March RMWS report, since it is released quarterly).

6.5 Wage Payment Arrears

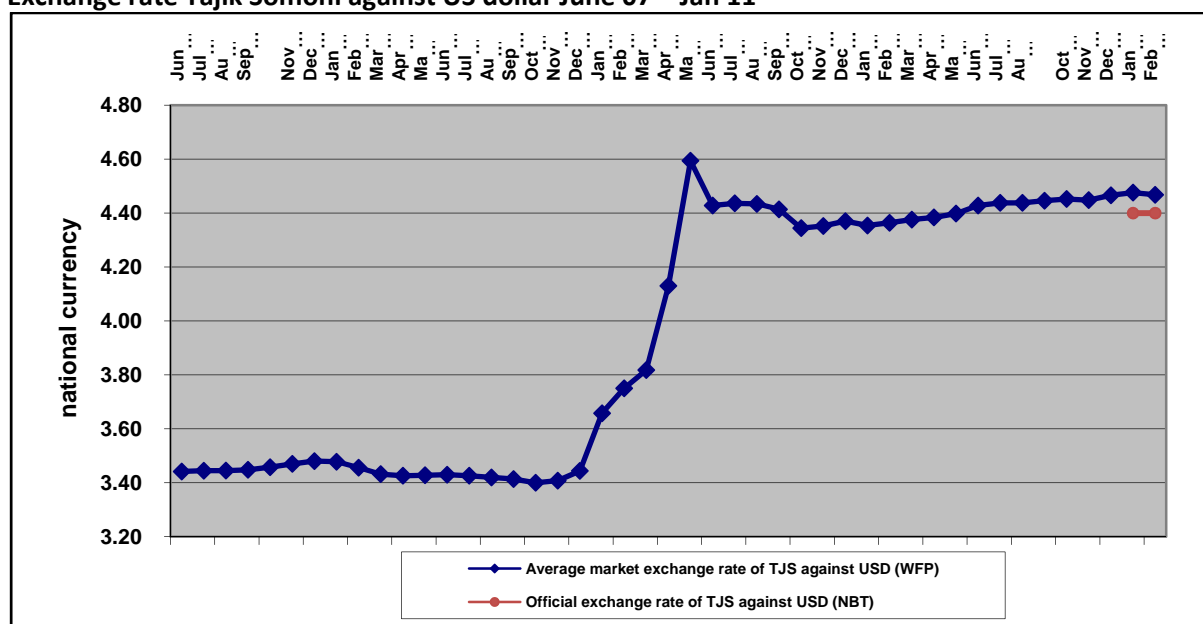
The total value of arrears in December 2010 was 11.1 million Tajik Somoni (2.5 million USD). The situation with wage arrears is improving and there are no retirement benefits arrears as of December 2010. The table on the right shows monthly totals of wage arrears from January to December in 2010.

Wage Arrears Jan – Dec 2010 ¹¹	
Month	TJS (000)
January	6,485
February	7,128
March	9,366
April	8,993
May	9,914
June	1,105
July	11,884
August	11,675
September	10,224
October	9,318
November	8,681
December	6,873

6.6 Exchange Rate

The National Bank of Tajikistan (NBT) official rate in January was 4.40 Tajik Somoni against the US Dollar on Feb 28, 2011, 0.03% down from December 2010. The following chart provides both the official NBT exchange rate and the WFP reported average market exchange rate for 5 markets in Tajikistan (4.5 Tajik Somoni per 1 USD) as of mid-January¹².

Exchange rate Tajik Somoni against US dollar June 07 – Jan 11



6.7 Remittances¹³

The State Statistics Agency is now reporting economic data on a quarterly basis. As a result, data on remittances for the first three months of the year will not be available until May. The National Bank of Tajikistan reported a total of 1.834 billion USD in remittances in 2009 and 2.363 billion USD in 2010, or an increase of 528.8 million USD.

¹¹ Data provided by Statistics Agency in Tajikistan as of January 20, 2011.

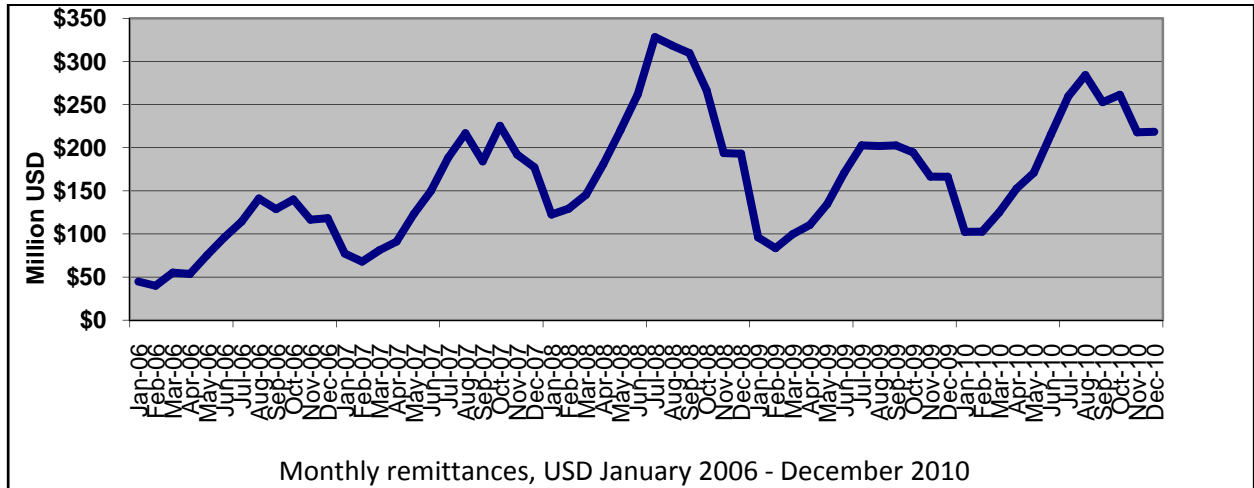
¹² http://untj.org/country_context/coordination_mechanisms/agriculture&food_security/fsms/

¹³ National Bank of Tajikistan

The table below shows detailed amounts of remittances in Tajikistan in 2010.

Remittances Per Month, 2010 (million USD¹⁴)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
102.4	102.6	125	152.5	170.8	215.5	259.4	284.2	252.8	261.3	217.8	218.4



¹⁴ Data provided by GoT working group expert on monitoring and warning under the Ministry of Economic Development and Trade of Tajikistan.

Annex A. Weather Forecast for March 2011**Khatlon Province and Lower Elevations, Direct Rule Districts (DRD)**

The average monthly temperatures at the lower elevations of DRD and in the foothills of Khatlon Province are expected to be 1 to 2^oC below normal. At lower elevations in Khatlon Province temperatures are expected to be 1^oC above normal, with 8 to 10^oC at lower elevations and 3 to 5^oC in foothills.

Temperatures at night are expected to range between 8 and -2^oC at the lower elevations and 4 to -1^oC in the foothills. Daytime temperatures are expected to range from 6 to 18^oC at the lower elevations and 1 to 11^oC in the foothills. The warmest weather is expected during the first and last 5-day period in the month, with temperatures 18 to 23^oC at lower elevations and 15 to 20^oC in the foothills.

Cloudy weather with precipitation (mainly rain) is expected in March. Precipitation will be above normal in the south (normal is 43-67 mm) and in the foothills (normal is 170-204 mm).

Sughd Province

The average monthly temperatures are expected to be 1 to 2^oC below normal with temperatures at the lower elevations 7 to 9^oC, and at the higher elevations -1 to -4^oC.

The warmest weather is expected during the second and the fifth 5-day period in the month with daytime temperatures at the lower elevations 16 to 21^oC and at the higher elevations 10 to -5^oC. Nighttime temperatures at the lower elevations will be 5 to 10^oC and at the higher elevations 6 to -1^oC. During the rest of the month daytime temperatures are expected to range from 5 to 17^oC at the lower elevations and from 6 to -4^oC at the higher elevations. Nighttime temperatures will range from 7 to -1^oC at the lower elevations and -3 to -14^oC at the higher elevations.

Monthly precipitation is expected during the month with cloudy and foggy weather, and will be above normal at the lower elevations (normal is 16-54 mm) and at the higher elevations (normal is 26-48 mm).

Mountainous Regions of DRD and Western Region of Gorno Badakhshan Autonomous Oblast (GBAO)

The average monthly temperatures are expected to be 2 to 3^oC below normal and will range from 1 to -3^oC.

During the month, nighttime temperatures will range from 0 to -9^oC and daytime temperatures will range from 7 to -2^oC. The coldest weather is expected during the fourth 5-day period in the month in DRD districts, with temperatures dropping by -10 to -15^oC.

Precipitation (rain, snow) is expected to be above normal with cloudy weather during the month in DRD (normal is 63-165 mm), southern slopes of Hissar mountains range (normal is 200-216) and in western areas of GBAO (normal is 18-93 mm).

Eastern Regions of GBAO

The average monthly temperatures are expected to be 1^oC below normal with temperatures -8 to -15^oC.

During the first 5-day period in the month low temperatures are expected at night -17 to -22 and 1 to -4^oC during daytime. General daytime temperatures will range from 5 to -5^oC, and nighttime temperatures from -14 to -19^oC.

Monthly precipitation is expected to be below normal: normal is 5-23 mm.

The aim of the Tajikistan Monthly Risk Monitoring Reports is to provide regular information and succinct analysis on the evolution of natural, economic, food-related, energy-related and other risk factors in Tajikistan. Data and information in this report are provided by different sources and compiled by the RMWS Group of Experts and UN Agencies in Tajikistan. The United Nations in Tajikistan and UKAid are not responsible for the quality or accuracy of the data provided by external sources or the analysis contained in this report.



Risk Monitoring and Warning System

Contact:

UNDP DRMP

earlywarning.tj@undp.org

37/1 Bokhtar Street, "VEFA" Center

7th floor, suite 702

Dushanbe, Tajikistan

The report is available at:

http://untj.org/country_context/coordination_mechanisms/disaster_management/compound_crisis/early_warning_indicators/