

# Tajikistan Monthly Risk Monitoring & Warning Report

## June 2010



### RISK TRENDS

#### NATURAL HAZARDS

The risk of natural hazards such as flooding, water-induced landslides, mudflows and flash floods is diminishing with the beginning of the normal summer dry period. However, local storms may produce flash flooding and mud flows at any time.

#### HEALTH

No new cases of polio have been reported since 12 June. Active surveillance is underway by the MoH and WHO.

#### ENERGY SECURITY

Tajikistan is basically covering electrical needs from national production, a situation expected to continue until October at the earliest. Discussions are underway for Tajikistan to rejoin the Central Asia grid, which would improve opportunities for electrical imports in winter and exports during the summer.

#### FOOD SECURITY

The harvest is underway for some crops and rainfall appears to be generally adequate for rain fed fields, gardens and pasture. An increase in the cost of fuel will likely translate into an overall increase in food and non-food commodities in the coming months.

#### MACROECONOMIC TRENDS

Tajikistan remains in a negative trade balance situation, which is putting pressure on government income and exchange rates. Remittances are increasing while prices may begin to increase due to an increase in fuel prices. The number of rail cars awaiting delivery from Uzbekistan has dropped 30 % since April, but is currently over 1,500 units.

#### REGIONAL RISKS

Conditions in the Kyrgyz Republic have stabilized with little immediate knock-on effect on Tajikistan. Further details on conditions in the Kyrgyz Republic can be found at

<http://www.reliefweb.int/rw/dbc.nsf/doc104?OpenForm&rc=3&cc=kgz>.

## 1 WEATHER-RELATED RISKS<sup>1</sup>

### 1.1 Weather-Related Events

The latest information on flooding in East Khatlon can be found at <http://www.untj.org/?c=7&id=318>. No other significant weather events were reported in May.

### 1.2 Forecast for July 2010

Temperatures in July are expected to be slightly above normal in Districts of Direct Rule, Sughd and Khatlon Regions and near or above normal in Gorno Badakhshan Autonomous Oblast (GBAO). Precipitation is forecast to be below the norm in Direct Rule Districts (DRDs), Khatlon Region and GBAO, and slightly above the norm in Sughd Region. Thunderstorms, strong in some locations, are expected during the middle of the month in DRDs, Khatlon Region and GBAO, and throughout the month, in Sughd Region. More details on the July forecast can be found in Annex A.

### 1.3 Precipitation Summary

As indicated below, precipitation in May was generally above the average in most of Tajikistan with the exception of eastern GBAO. Overall, rainfall appears to have been heaviest during the first ten days of the month, particularly in the south-west of the country. A summary of weather conditions in May 2010 can be found in Annex B. A summary of the weather during Spring, 2010 can be found in Annex C.

**Precipitation, January to May 2010**  
**Total Precipitation in mm and % of mean**

Location	January		February		March		April		May	
	Prec.	% of mean	Prec.	% of mean	Prec.	% of mean	Prec.	% of mean	Prec.	% of mean
Dushanbe	64.6	85	146.3	174	114.6	82	54.2	44	121	148
Kurgan-Tyube	17.4	42	86.7	188	43.3	67	47.1	108	82.3	346
Khorog	23.3	69	116.6	333	56.1	128	42.9	210	64.3	215
Garm	78.4	115	239.4	281	93.7	70	117.5	82	196.9	181
Khujand	20.9	133	38.3	255	20	80	44	164	90	448

<sup>1</sup> The information in Sections 1.2 and 1.3 and Annexes A, B and C is based on reports from State Hydro-meteorological Agency.

## 2 ENERGY

### 2.1 Electricity Supply

Average Electricity Generation - Tajikistan November 2009 - May 2010 (Gigawatts)			
Year	Month	Nurek	Total for Tajikistan
2009	November	858	1303
	December	866	1414
2010	January	849	1429
	February	825	1382
	March	809	1383
	April	824	1267
	May	986	1346

Electrical power generation for May was slightly greater than in April but within the general range for the last seven months. Water inflows to the Nurek cascade<sup>2</sup> have increased with the spring and summer melting of snow and ice (see section 2.4 below). While these increased inflows allow the Nurek cascade of power stations to produce electricity above current demand, there is currently no market for this additional output.

As reported last month, the lack of a market for summer electrical production, in past years bartered or sold to Uzbekistan, is not allowing Tajikistan to generate income which can be used to cover the cost of electrical imports during the coming winter. The expected result is that the higher costs of power imports during the winter will fall on the consumer, the importer (Barqi Tojik) or the national budget; or the needed winter imports will not be available. Media reports indicate that discussions are underway on Tajikistan rejoining the Central Asia electrical grid.

### 2.2 Electricity Availability

No unusual unavailability of electricity was reported during May. Consumption of electricity in May was at similar levels as the preceding month.

Average Daily Electricity Consumption - Tajikistan (Gigawatts) (Not including GBAO)				
Month	South	North	Talco	Dushanbe
April	35	7	18	6
May	36	6.5	18.5	5.9

### 2.3 Natural Gas

Natural gas imports for May were 14 million m<sup>3</sup>, against 18 million m<sup>3</sup> in April, and 15 million m<sup>3</sup> in March 2010.

Tajikistan continues to face problems in paying for natural gas imports, primarily from Uzbekistan. Media reports indicate that as of 1 June 2010, Tajiktransgaz had outstanding debts with Uztransgaz totaling \$800,000. Further, the price of natural gas has meant that Tajikazot, which produces urea ("carbamide") for use in fertilizer, has had to stop production as the cost of the resulting fertilizer is above what farms are able to pay. (*Asia Plus*, 18 June 2010).

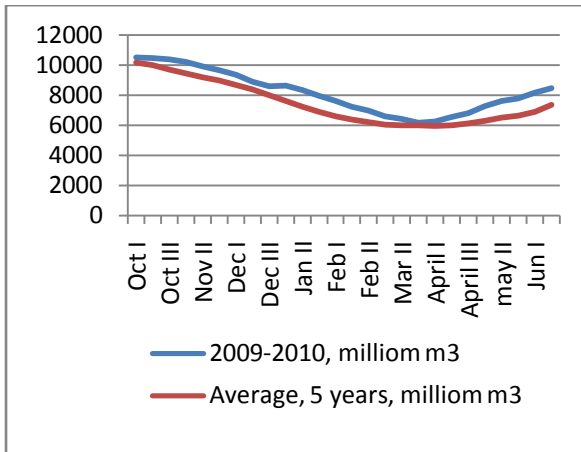
### 2.4 Reservoir Levels<sup>3</sup>

Water levels in Nurek Reservoir (the main source of hydro-electric power in Tajikistan) continue to be above average. The inflow of water has dropped to near average levels in early June while outflows in May and June have varied but appear to be above the 5 year average.

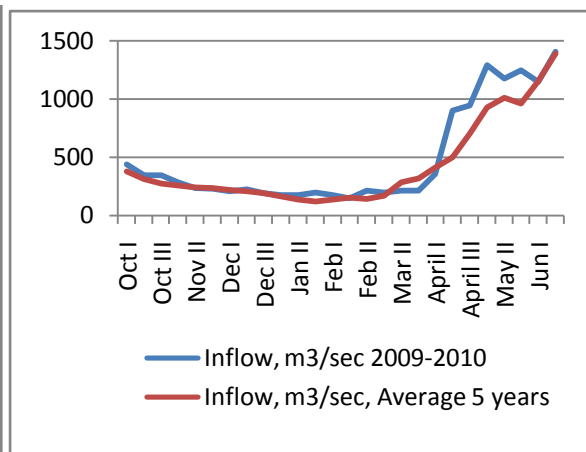
<sup>2</sup> The dams along the Vakhsh River.

<sup>3</sup> Data from CAWaterInfo, [http://www.cawater-info.net/analysis/water/nurek\\_e.htm#](http://www.cawater-info.net/analysis/water/nurek_e.htm#)

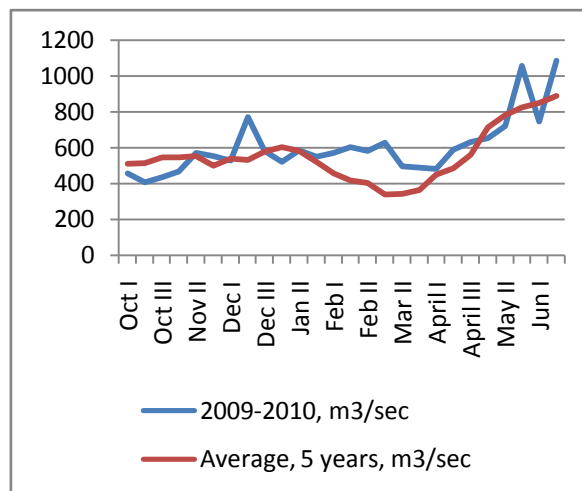
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**Water in Storage, Nurek Reservoir**



**Inflow, Nurek Reservoir**



**Outflows, Nurek Reservoir**

### 3 Food Security

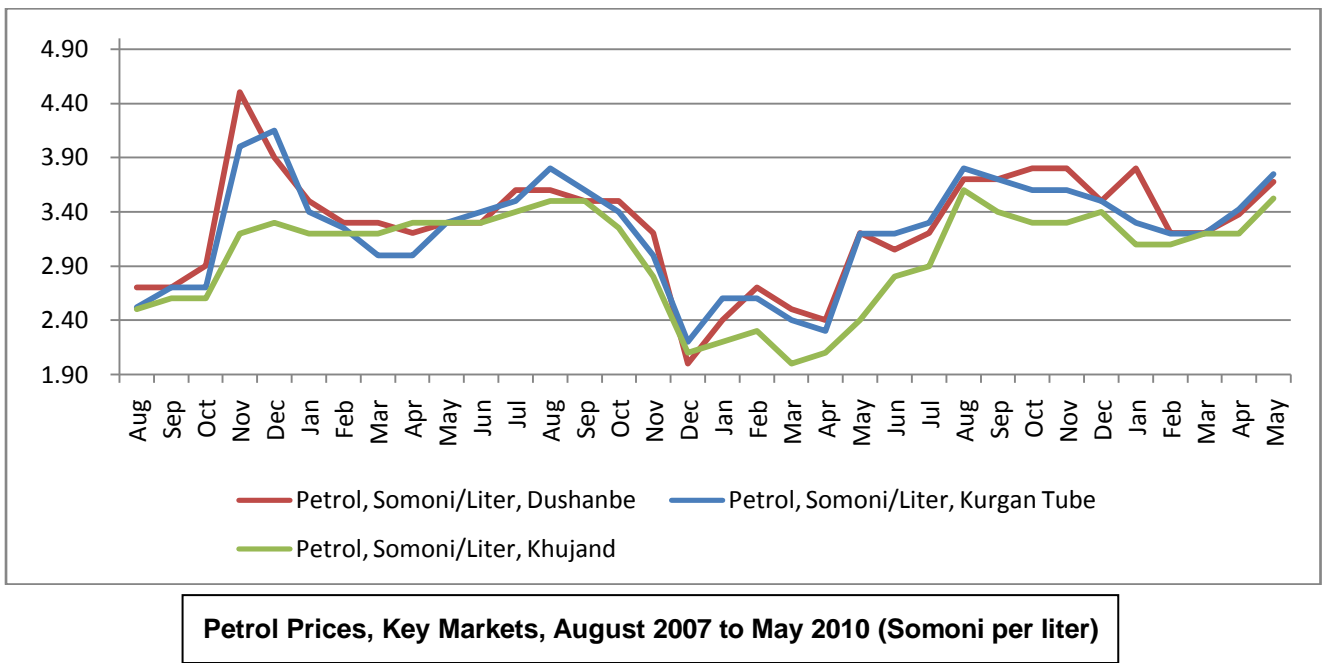
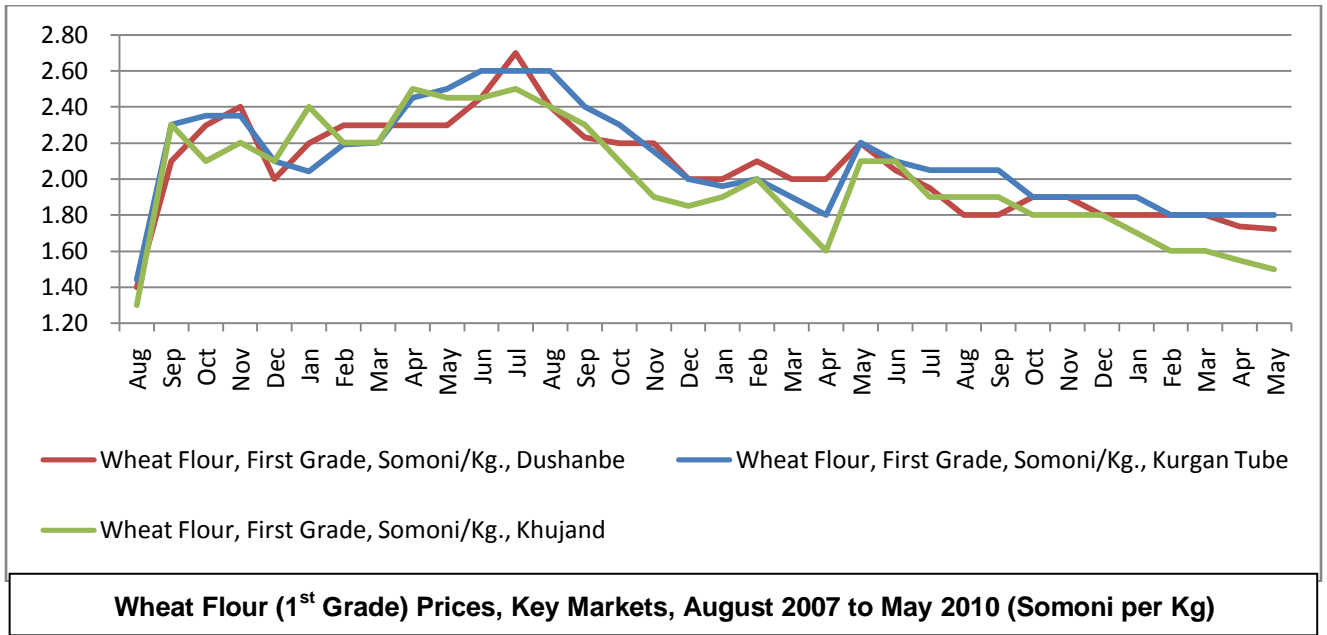
#### 3.1 Food and Fuel Prices<sup>4</sup>

As indicated in the table below, wheat flour prices are the lowest levels since August 2007, a point before the dramatic price increases which began in late 2007. The decreasing trend is, on the surface, good news for consumers, although it is unclear whether other factors (e.g., the rail freight held in Uzbekistan, the liquidity issues related to the sale of stock shares and increased remittances) are having an effect on purchasing power and prices.

As reported in the media, fuel (petrol) prices have been increasing. The reasons for the increase has been attributed to the delays in freight traffic from Uzbekistan as well as a recent increase in prices due to the imposition of a 30% tariff on fuel from Russia. (*Asia Plus*, 14 June 2010). These fuel price increases have not become evident in price data (e.g., the price of wheat flour), but this expected impact will likely be more evident from June data.

<sup>4</sup> Food and fuel prices are from WFP Food Security Weekly Market Monitoring, Tajikistan June RMWS Report

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### 3.2 Food Basket Prices

The cost of a basket of goods for one family for one month May 2010 was equal to 109.05 Somoni, (24.9 USD), compared to 102.9 Somoni in April. The standard food basket for Tajikistan was equal to 210.57 Somoni (48.18 USD) compared to 203.82 Somoni in April.

## 4 HEALTH

As of 22 June 2010, Tajikistan had reported 643 cases of Acute Flaccid Paralysis (AFP), of which 275 are laboratory confirmed as wild poliovirus type 1, and 60 are negative. All laboratory-confirmed cases reported so far are from the south-western part of the country (Dushanbe City and surrounding provinces, Khatlon and Kulyab zones of Kurgan-Tube Region); from 25 of 58 districts. There is currently no evidence of transmission to GBAO region and Sughd oblast.

A decrease in the number of new cases was observed during the 3<sup>rd</sup> and 4<sup>th</sup> rounds of vaccinations indicating the initial effectiveness of the immunization campaigns. Since 12 June 2010 there have been no new cases of AFP reported. Active surveillance and monitoring for new AFP cases continues nationwide by the MoH and WHO. (Sources: WHO Tajikistan)

## 5 ECONOMIC TRENDS

**Delayed Rail Freight Deliveries to Tajikistan**

Commodities	Rail Cars Reported Delayed		
	14-Apr-10	12-May-10	22-Jun-10
Bauxite	270	None reported	None reported
Fuel and Lubricants	645	705	485
Equipment (unspecified)	25	None reported	None reported
Equipment (earthmoving)	12	None reported	None reported
Cement	44	215	6
Asphalt	30	81	117
Flour and Grain	121	50	84
Gas	None reported	83	62
Other Commodities	1,000	627	748
<b>Total</b>	<b>2,147</b>	<b>1,761</b>	<b>1,502</b>

Delays in rail freight deliveries from Uzbekistan continue, but the number of units reported as delayed in Uzbekistan as of 22 June 2010 was approximately 15% less than in mid-May and 30% less than in mid-April. The scale of delays is expected to continue to have impacts on commercial activities in Tajikistan, including an impact of trade credit and future imports.

Iran has publically raised the issue of rail freight delays, which may be impacting the Iranian-supported Sangtuda II power plant. Iran has indicated it will not allow Uzbek-bound rail cargo to pass through Iran if Tajik-bound rail cargos are delayed in Uzbekistan.

### 5.1 General Trends

Gross Domestic Product (GDP) in January-May 2010 is 7.1 billion Somoni, that is 6.2% more than for the same period of 2009. In May, GDP equal to 1.7 billion Somoni. The portion of goods production in GDP in May decreased by 0.2% and was equal to 29.8% (in April 30%). The portion of services in GDP structure (57%) has not been changed and the portion of taxes increased from 13.0% in April to 13.2% in May. In general, the portion of taxes in GDP structure increased from 12.7% to 13.2% in January-May 2010 in comparison with the same period of 2009.

In May the excess of internal cumulative expenses over the cumulative incomes in the economy of the country (i.e. with respect to GDP) was still high and was equal to 96.2 mln. USD or 24.7% (in March and April 38.5% and 28.4%, respectively). The excess of import costs over export income equal 96.2 million USD for May, with the cumulative excess for January to May totaling 475.0 million USD. A continued need to pay for imports will likely lead to an increase in the demand for foreign currency and a drop in the value of the Somoni.

Exports and imports decreased by 25% and 12%, respectively, in May compared to April 2010. Weak productive activity means a reduction in indirect tax income (equal 89% of all the tax proceeds) for the government. This will worsen the government's income situation. As a result, the government will need to increase income, either through additional foreign assistance, through increased tax collection, or both. It is likely that the current moratorium on tax checks on private enterprises will not be extended beyond July 1, 2010.

### 5.2 Inflation expectations in economy

According to the Tajik State Statistic Agency, in May, inflation in the consuming sector is 0.4%. The prices for food and non-food items increased by 0.4%, and paid services – by 0.5%. Since the beginning of the year, inflation in the consuming sector reached 2.2%, and the prices for food – increase by 1.4%, for non-food items – by 2.2%, and paid services – by 6.0%.

### 5.3 Population Movements To/From Tajikistan

During the first 5 month of 2010, 258,477 migrants left Tajikistan, up from 193,153 for January to April. This 34% increase in one month confirms the normal seasonal trend of migrant flows increasing as warmer weather increases job opportunities in Russia and elsewhere.

There are currently 4,465 persons seeking refuge in Tajikistan. A total of 99% of these individuals are from Afghanistan, with about 80% ethnic Tajik.

### 5.4 Employment and Wages

According to preliminary assessment at the beginning of May 2010, the number of economically active individuals (employed and officially registered as unemployed) is 2,115,400, with 2,067,800 (97.8 %) actively employed and 47,500 officially unemployed.

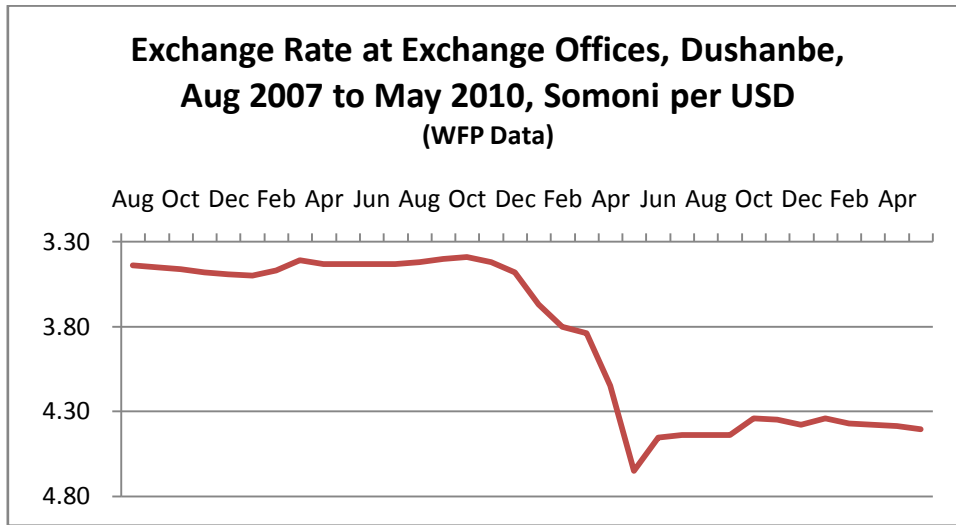
The average monthly nominal salary for May paid to those working on contract basis was 345.34 Somoni (77.6 USD), a drop of 6.2% compared to April 2010 but an increase of 21.3% compared to the same point in 2009. (The minimal salary is 60 Somoni.) The level of the real salary (taking into consideration the price index) for the beginning of May 2010 decreased in comparison to April by 6.4%, but increased by 14.7% compared to the same period in 2009.

### 5.5 Wage and Payment Arrears

Total state sector wage and pension arrears in May was 43.07 million Somoni (9.82 million USD), comprised of 21.53 million Somoni (4.8 million USD) for salaries and 21.54 million Somoni (4.84 million USD) for pensions. These amounts are slightly less than in April 2010.

The largest arrears are in the Khatlon Region, and which may limit capacities to address the impact of the disasters in the Region during May.

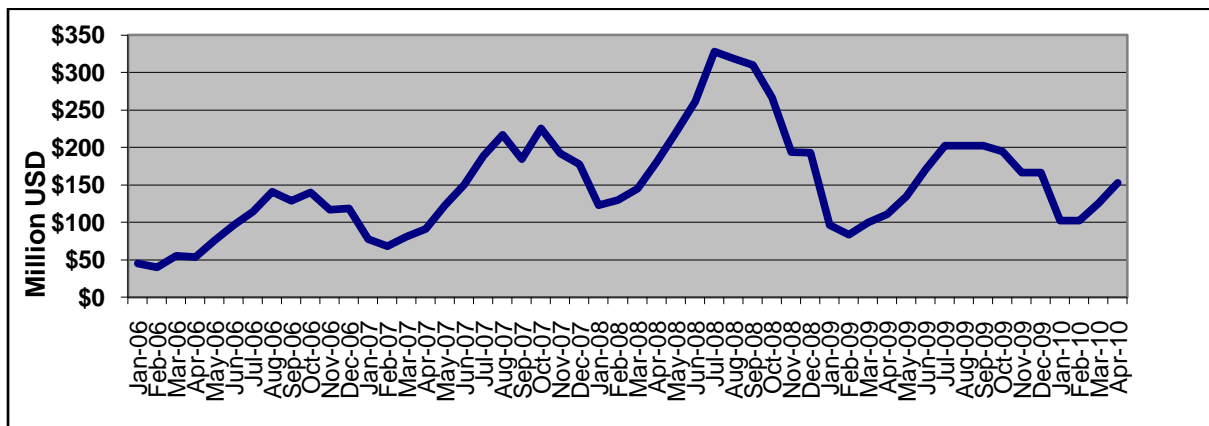
**5.6 Exchange Rate**



During May the Somoni dropped more than 1.7% against the USD. Independent local experts link this drop to the strengthening of the US dollar against the Euro on international markets. At the same time, other factors influencing the exchange rates for the Somoni include an increase in remittances and attempts by the government (so far unsuccessful) to place 350 million Somoni (78 million USD) collected through Rogun shares sales with local banks to gain interest on this investment. Increased remittances should strengthen the Somoni, while the placing of Somoni into commercial circulation could weaken the Somoni. Forecasts are for devaluation of national currency rate to be 0.5 to 1% over the mid-term.

**5.7 Remittances<sup>5</sup>**

Remittance data from January 2002 to May 2010 is provided in the following table. The level of remittances in May, 170 million USD, is the second highest level for this month since 2002, and approximately 27% higher than for May 2009. Total remittances in 2010 to May total 653 million USD.



<sup>5</sup> Data from the National Bank of Tajikistan.



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*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 etc. 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 are not responsible for the quality or accuracy of the data provided by external sources.*

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## **Annex A: Localized Meteorological Forecast for July 2010 from State Hydro-meteorological Agency**

(All temperatures in Celsius.)

### **Khatlon Region and**

#### **Lower Elevations, Direct Rule Districts**

The average monthly temperatures at lower elevations are expected to be 1<sup>0</sup> above climate norm and between 27-30<sup>0</sup> in valleys and 24 to 25<sup>0</sup> in foothill areas.

Nighttime temperatures are expected to be 17 to 22<sup>0</sup> in the valleys during the night time 17-22<sup>0</sup>, in the south 20-25<sup>0</sup> above zero, in the valleys of DRS the fluctuation of day time temperature will be from 32<sup>0</sup>-37<sup>0</sup> to 37<sup>0</sup>-42<sup>0</sup> above zero, in south districts mainly 37<sup>0</sup>-42<sup>0</sup> above zero. In sub-mountain districts during the night time 17<sup>0</sup>-22<sup>0</sup> above zero, during the day time 30<sup>0</sup>-35<sup>0</sup> above zero.

Monthly precipitation is expected to be below the norm (0.5-5 mm in valleys and 6-21 mm in foothills). Scattered showers and thunderstorms are mostly probable during the second ten days of the month.

### **Sughd Region**

Average monthly air temperature in the valley and foothill areas is expected to be 1.5<sup>0</sup> above climatic norm and range from 26<sup>0</sup> to 28<sup>0</sup> in valleys and 19 to 20<sup>0</sup> in the mountains.

Nighttime temperatures in the valleys are expected to be 17<sup>0</sup> to 22<sup>0</sup>, with daytime temperatures 35<sup>0</sup> to 40<sup>0</sup>. In the mountains nighttime temperatures will be 9<sup>0</sup> to 14<sup>0</sup> and 24<sup>0</sup> to 29<sup>0</sup> during the day. The coolest weather is expected to be at the end of the month, when nighttime temperatures in some valley areas will be 13<sup>0</sup> to 18<sup>0</sup> and between 30<sup>0</sup> and 35<sup>0</sup> during the day.

Monthly precipitation in lower elevations will be above normal (norm: in the valleys from 3 to 8 mm, in foothills and mountainous areas from 8 to 29 mm). The scattered thunderstorms in foothills and mountains will be possible throughout the month. During the thunderstorms, winds up to 72 km/hr can be expected.

### **Upper Elevations, Direct Rule Districts and western GBAO**

Average monthly temperatures will be within the climatic norm and range from 20<sup>0</sup> to 23<sup>0</sup>. Nighttime air temperatures are expected to range from 9 to 14<sup>0</sup> in the Direct Rule Districts and in GBAO – 12<sup>0</sup> to 17<sup>0</sup>. During the day temperatures will range from 27 to 32<sup>0</sup>.

Monthly precipitation is expected to be less than normal (norm: 3-8 mm, for the districts of republican subordination norm is – 20-32 mm). Rain and thunderstorms are expected during the second ten days of the month with winds reaching 70 km/hr.

### **Eastern GBAO**

Average monthly temperature is expected to be 1<sup>0</sup> above climatic norm, and range from 14<sup>0</sup> to 15<sup>0</sup>. Nighttime temperatures are expected to range from 3<sup>0</sup> to 12<sup>0</sup> and during the day from 17<sup>0</sup> to 22<sup>0</sup>.

Precipitations will be rate and less than usual (norm 5 to 15mm, close to Fedchenko glacier – 44 mm).

## **Annex B: Weather review of in the Republic of Tajikistan for May 2010 from State Hydro-meteorological Agency**

(All temperatures in Celsius.)

The average air temperature was 0.5<sup>0</sup> above climatic norm: in the valley-sub-mountainous districts 19<sup>0</sup>-22<sup>0</sup>, in mountainous districts 10<sup>0</sup>-15<sup>0</sup>, in the highlands 2<sup>0</sup>-7<sup>0</sup> above zero.

The lowest temperatures were registered on 4-5 and 7 May, when the air temperatures in the valleys during the night time were up to 12<sup>0</sup>-13<sup>0</sup> above zero and during the day time – up to 21<sup>0</sup>-23<sup>0</sup> above zero. In the mountainous districts temperatures were 12<sup>0</sup>-17<sup>0</sup> above zero.

The heaviest precipitation was registered during 6 and 7 May in the central and south districts of Tajikistan (Chormazak 85 mm, Yavan 72 mm, Muminobod 42 mm, Pyanj and Khovaling 36 mm, Farkhor and Dangara 35 mm).

A 50 years analysis for Dushanbe shows that in average precipitation in May is in the range of 73 to 135 mm. However there were some years when the precipitation was 1.5 to 2.5 times above normal (1963, 1967, 1968, 1969, 1972, 1975, 1978, 1979 and 2009).

## **Annex C: Weather review of in the Republic of Tajikistan for Spring, 2010 from State Hydro-meteorological Agency**

(All temperatures in Celsius.)

For spring period the activation of cyclonic activity is typical at the front of two latitudes.

March in Tajikistan often causes surprises: thunderstorms and hail, abnormal warmth and sharp changes from heat to cold. It is often raining in March, as a rule, there are heavy rains.

In March the average monthly air temperature was 2-4<sup>0</sup> above normal, including: in valleys of districts of republican subordination and Khatlon oblast 13-14<sup>0</sup> above zero; in the sub-mountainous districts 8-10<sup>0</sup> above zero; in the mountains 2-5<sup>0</sup>; in the highlands 3-6<sup>0</sup> below zero; in Bulunkul – up to 12 below zero.

The monthly quantity of precipitation in the most districts of the republic was lower than the average for many years. The lowest quantity of precipitations in the mountainous districts was 23-70%. In the valleys the total quantity of precipitations in the mountainous districts was mostly within 60-100% and only in some districts in GBAO more than normal (130-230%).

April is the month of transmission period in the course of which, the intensive increasing of solar radiation causes the fast increasing of air temperature. Incidentally, it reaches its maximum in April, this month is characterized by weather instability. The atmosphere of the whole hemisphere is readjusted to the summer circulation regime.

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The strengthened recurrence of meridional circulation, in case of which there are the anomalies of the opposite signs at the conjugated territories, and which can last for a long time.

April 2010 was characterized by the warm weather. The average monthly air temperature at the whole territory of the republic was  $1-2^{\circ}$  higher than normal and include: in the valleys  $15-20^{\circ}$ , in the mountains  $5-10^{\circ}$ , in Darvaz  $16^{\circ}$  ( $3$  to  $7^{\circ}$  higher than average indicators for many years), in the highlands –  $1$  to  $-3^{\circ}$ .

On 10 April the so called frontal zone, spread from the east of Mediterranean Sea to Central Asia. The great temperature contrasts provided formation of south cyclones. These cyclones brought the exceptionally warm weather on 8-12 April with the temperature of  $28-31^{\circ}$  above zero. This temperature for the districts in valleys of Tajikistan appeared to be  $6-7^{\circ}$  higher than normal

During the night of 11-12 April one of the south cyclones moved to the east of Central Asia. In the course of the atmospheric front passage, there were rains, thunderstorms, in some places with hail in Tajikistan, at the areas above 3000 m – snow.

The most intensive precipitation has been registered in Khatlon Region and Rasht group of districts, sub-mountains of Soughd Region and Darvaz district with the volume of precipitation ranging from 20 to 50 mm (Khovaling 50 mm in the course of 12 hours). In the valleys and sub-mountainous districts of Khatlon oblast the mudflows occurred.

In April in Dushanbe and the other valley districts of central Tajikistan in 10% of the years (once in 10 years) the monthly quantity of precipitations could be not less than 170 mm, and in 90% of years – less. The greatest daily quantities of precipitations are registered in Dushanbe during the spring period, the period of this maximal occurrence. Thus, on 19 April 1947 there were 83 mm of precipitations, that is about 70% of monthly norm. As the analysis showed, that once in 10 years in April the daily maximum – 50 mm can be expected and once in 60 years – up to 87 mm.

The greatest quantity of raining days per year is observed during the spring time. The analysis for 83- years for Dushanbe showed that in average in April there are 12-17 days with precipitations. However there were some years when 20-24 days with precipitations have been observed (1948, 1950, 1958, 1964, 1996 and 2009).