

REPORT ON MONITORING EARLY WARNING INDICATORS TAJIKISTAN, May 2009

Below is an update on “Early Warning Indicators” for Tajikistan covering:

- I. PRECIPITATION/NATURAL DISASTERS/EMERGENCIES
- II. WATER VOLUMES IN THE RESERVOIRS
- III. ENERGY
- IV. MACROECONOMIC TRENDS
- V. FOOD & FUEL PRICES
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- VII. MIGRATION



Data and information in this report have been provided by different sources and compiled by UNDP Disaster Risk Management Programme in Tajikistan. Interpretation of data is provided with the help of governmental institutions, UN Agencies, international financial institutions and individual specialists.

The views and opinions expressed in this report do not necessarily represent the views of UNDP.

For any questions or suggestions, please contact: earlywarning.tj@undp.org

I. PRECIPITATION/NATURAL DISASTERS/EMERGENCIES

Last year, Tajikistan suffered from unusual drought, leading to the loss of agricultural crops. This year, by contrast, the spring has seen abundant precipitation. As is shown in the table below, in the past month precipitations in most regions of Tajikistan were well above seasonal norms. Especially in the last ten days of April and the first ten days of May, precipitation exceeded normal levels by more than 150%.

%age of precipitation relative to multi-year norms 1 April – 10 May 2009¹				
Name of station	April			May
	1-10	11-20	21-30	1-10
Dushanbe	157	93	461	<u>369</u>
Khujand	200	89	380	<u>17</u>
Kurgan-Tyube	100	175	164	<u>614</u>
Rasht	90	203	182	<u>216</u>
Farkhor	105	89	333	<u>156</u>
Sangiston	123	131	155	<u>183</u>
Khovaling	93	67	298	<u>221</u>

Improper land management, lack of trees combined with the heavy rainfalls in the last month have caused floods and mudflows that have damaged residential and administrative buildings, roads, and river basin infrastructure. As reported by the Committee of Emergency Situations and Civil Defense of the Republic of Tajikistan (CoES), more than 50 natural disasters have been reported since the beginning of the year. 26 fatalities have been reported; more than 2,000 houses were damaged or destroyed, and 680 head of livestock have been lost.

Although a complete assessment of disaster-affected areas has not been made yet, so far government estimated the economic loss to over USD 100 million. While this figure represents less than 1% of GDP, it represents a considerable hardship for the communities and households affected—particularly in light of the financial crisis, when the Government’s declared fiscal position precludes significant expenditures to mitigate the consequences of the disasters. An emergency appeal has been launched by the government seeking support from the international community.

The greatest damage occurred in villages in Khatlon province’s Khuroson district, which were hit by several consecutive mudslides. In this disaster area, with the help of international organizations, three tent camps with more than 414 tents have been established. As the number of families in need of shelter is increasing, further needs may arise. For the time being, REACT partner organizations and humanitarian cluster leads have been supplying the affected households with water, food and non-food items. Local authorities have allocated 18.65 ha of land for the construction of houses to relocate disaster-affected households now living in the tent camps. However, concerns were raised by humanitarian actors: as the relocation process will take more than 6 months, rising temperatures could exacerbate issues of hygiene, water and sanitation, posing threats to the health of the households awaiting relocation.

According to UN World Health Organization’s assessment, due to lack of adequate hygiene facilities and access to clean water, populations residing in the camps are at high risk for communicable diseases, especially water-borne and skin diseases. As the

¹ Hydro-Meteorological Agency

temperature goes up the risk of heat related illness may also increase detrimentally impacting access to care.

“Local facilities are beginning to report cases of diarrhea among children in both tent camps. This is likely to continue and worsen due to that all tent camps lack adequate numbers of toilets or shower and washing facilities; drinking-water supply is currently inadequate for needs. The situation in this regard is critical”.²

River basin	Snow storage locations	Altitude from sea level (m)	Water storage in snow (mm of water level)			% change compared to:	
			2009	2008	Norm	2008	Norm
Varzob	Khoja Obi Garm	1850/2120	161	164	370	-2	-56
	Takob	1900/2630	210	213	354	-1	-41
	Anzob	3373	770	385	689	100	12
Pyanj	Maykhura	1920/2900	442	303	422	46	5
	Vanj	1970/2430	197	23	186	757	6
	Gunt	2700/3960	139	19	103	632	35

According to information from the Hydro- meteorological services of Tajikistan shown in the table above, in early March 2009 snow storage in upstream zones of the river basins of Anzob (Varzob River) and Gunt (Pyanj River) was 12-35 % above the norm. There is an apprehension that temperature increase may trigger flooding from these rivers and pose threat to residential, economic and administrative infrastructures located along the rivers. If the temperature in upstream zones increases to 25-35 °C, floods might affect downstream regions until the end of June 2009.

II. WATER VOLUMES IN THE RESERVOIRS

On a more positive note, the unusually wet spring is increasing water levels, flows, and volumes in Tajikistan’s rivers and reservoirs. In addition to stocking water for electricity generation, the country was able to release water for irrigation purposes for the neighboring countries’ agricultural lands. Strong recoveries in water flows are recorded in the Kofarnihon, Obihingov, and Varzob rivers, relative to historical averages as well as to 2008’s drought-stricken levels. Perhaps more importantly, data posted on the CAWIB web site (http://www.cawater-info.net/index_e.htm) indicate that water volumes at the Nurek and Kayrakkum hydropower station reservoirs have also recovered. These trends bode well for Tajikistan’s food and water security prospects in 2009, as well as for relations with neighboring countries, which rely on water released from Nurek and Kayrakkum for downstream irrigation.

On 22 May 2009, the water level in Nurek reservoir was 867.55 meters above the sea level, which is more than 10 meters above the dead-zone mark. The water level in the reservoir is continuing to rise slowly. Thus, in the first 20 days of May, water inflow was 29 % higher than expected, resulting in a water volume exceeding plans by 8.1%. The water inflow rates are expected to improve further this month.

In the first twenty days of May 2009, water inflow in the Yohsu, Kofarnihon and Sirdaryo River in Qizilqishloq basins were 139-160% higher than during the same period of 2008. In the Isfara and Gunt basins, on the other hand, water inflow were 27-70% below previous year’s levels, and remained well below historical averages. When compared to the multi-year norm, the water level in some major river basins such as

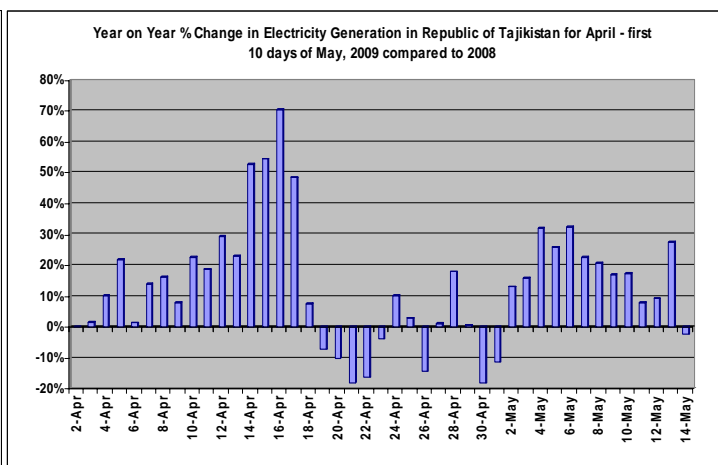
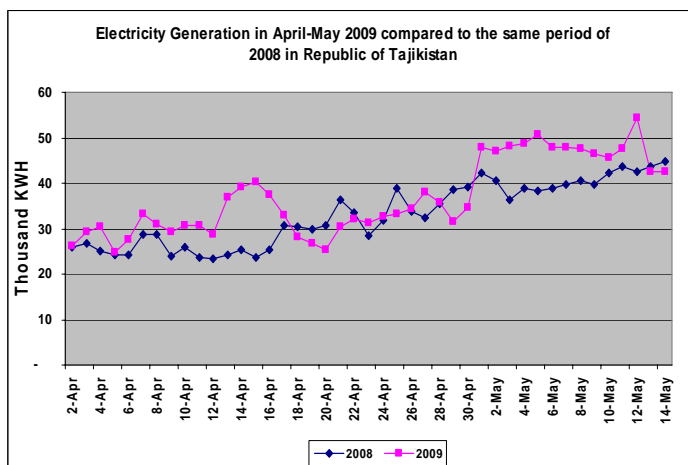
² Health Cluster Strategy, May 2009

Varzob, Obihingou and Kofarnihon increased by 16-60% more in the first twenty days of May 2009; in some others, such as Yokhsu and Gunt, it decreased by 29-50%.³

Water inflow in main river basins of Tajikistan in the first 10 days of May, 2009							
#	River	Basins	Average in cubic meters per second			Current % change compared to	
			2009	2008	Norm	2008	Norm
1	Yokhsu	Karboston	89.5	37.5	125	138.7	-28.4
2	Isfara	Tosh-Kurghon	7.13	9.79	8.07	-27.2	-11.6
3	Varzob	Dahana	115	78.9	99.6	45.8	15.5
4	Gunt	Khorog	35.1	115	70.7	-69.5	-50.4
5	Kofarnihon	Tartki	641	267	400	140.1	60.3
6	Sirdaryo	Qizilqishlok	633	243	636	160.5	-0.5
7	Obihingou	Ezgand	301	244	197	23.4	52.8
8	Vakhsh	Darband	745	774	768	-3.7	-3.0

III. ENERGY

Rising water levels are also making recovery possible in electricity generation. In April 2009, Tajikistan's Hydro Electric Power Stations generated more than 950 million kWh of electricity, which is almost 19% more than during the same period of 2008. Over the first 15 days of May, 665 million kWh were generated. Consequently, there is no power rationing in the country at this moment. However, due to population growth and the decapitalization of Tajikistan's electricity infrastructure, thousands of households still remain without reliable access to electricity.



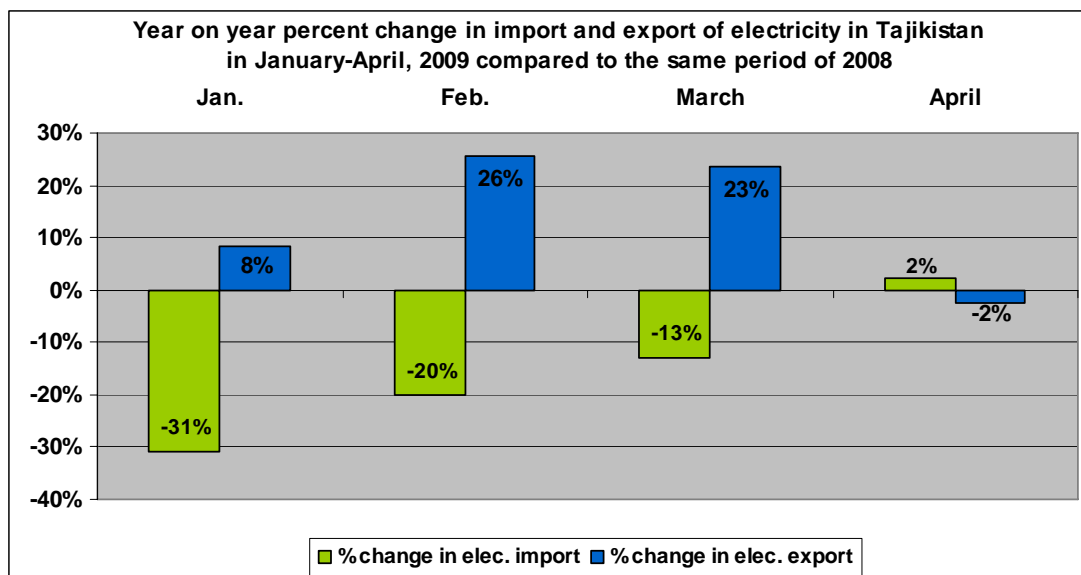
Energy import

As the local energy generation improved with the excess water inflow into the reservoirs, since 01 May 2009 Tajikistan has stopped importing electricity from Uzbekistan and Turkmenistan. Currently, the country is capable of meeting its own domestic demand for electricity, including industrial demand; moreover, energy borrowed from neighboring countries such as Kazakhstan and Uzbekistan during the winter and early spring of 2009 can now be paid back.⁴ As of 22 May Tajikistan had completely paid off the power borrowed from Kazakhstan during winter and spring 2009.

³ Hydro - Meteorological Agency

⁴ Barqi Tojik

In April, Tajikistan imported 626 million kWh of electricity from neighboring countries. The total of imported electricity since the beginning of the year amounts to 1 billion and 896 million kWh, which is 13% more than in the same period of 2008.⁵ Out of this, 1 billion kWh were supplied by Turkmenistan through Uzbekistan's transmission grid.⁶



Gas

Due to arrears of some 16 million USD, gas supplies are still inadequate and the volume of gas imports (mostly from Uzbekistan) remains low (454.3 thousand cubic meters, as opposed to the anticipated 1.2 million cubic meters).⁷ Many industrial enterprises continue to refuse to pay TajikGas for gas already consumed; no substantial gas payments have been registered over the past few weeks.

Imported natural gas is mainly provided to industrial enterprises, including the TALCO aluminum smelter. A part of it also benefits residential consumers in Dushanbe and in northern cities of Tajikistan.

IV. MACROECONOMIC TRENDS

According to a 20 May announcement posted on the National Bank of Tajikistan's website, GDP during January-April grew by some 3% (compared to the same period in 2008), thanks largely to 7-8% growth reported in the construction and agricultural sectors. On the other hand, a 12% decline in industrial production was reported,⁸ due in part to the constraints on the manufacturing sector imposed by the sharp energy shortages during the first quarter. Perhaps more importantly, collapsing remittances and continuing inflation—especially for foodstuffs—continue to raise concerns about household incomes and food security.

Tajikistan's continuing industrial recession (industrial output dropped some 4% in 2008) is reflected in the data from TALCO, which reported a 15% production decline for the first quarter of 2009 (compared to the same period of last year). Some 30% of 232 industrial enterprises operating in the northern Sughd region have suspended operations

⁵ Ibid.

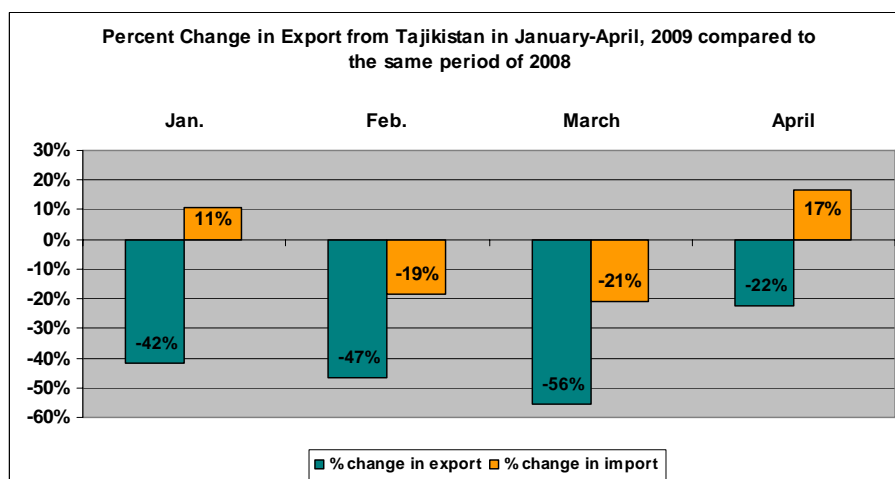
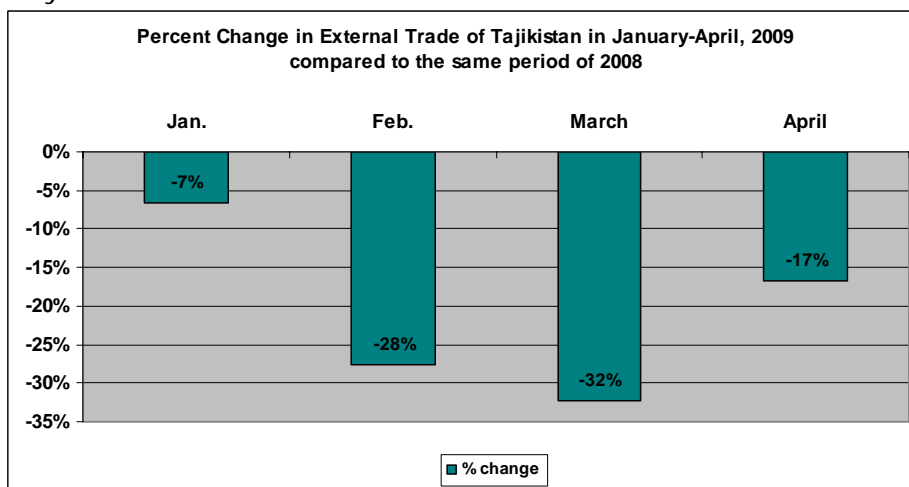
⁶ According to an agreement signed between Tajikistan and Turkmenistan in 2007, Turkmenistan is expected to provide 1.2 billion kWh of electricity to Tajikistan every autumn and winter until 2012

⁷ Comments from Mr. Shawkat Shoimov, Deputy Director of State Unitary Company "TojikGas"

⁸ See <http://www.nbt.tj/?c=44&id=44&a=405>

due to the effects of the global financial crisis; the majority of their workers were asked to leave on sabbatical.⁹

The “Tajikcement” state-owned enterprise likewise reported a 26 % output drop in the first quarter, due to a lack of the natural gas supplies needed for the plant to run at full capacity.



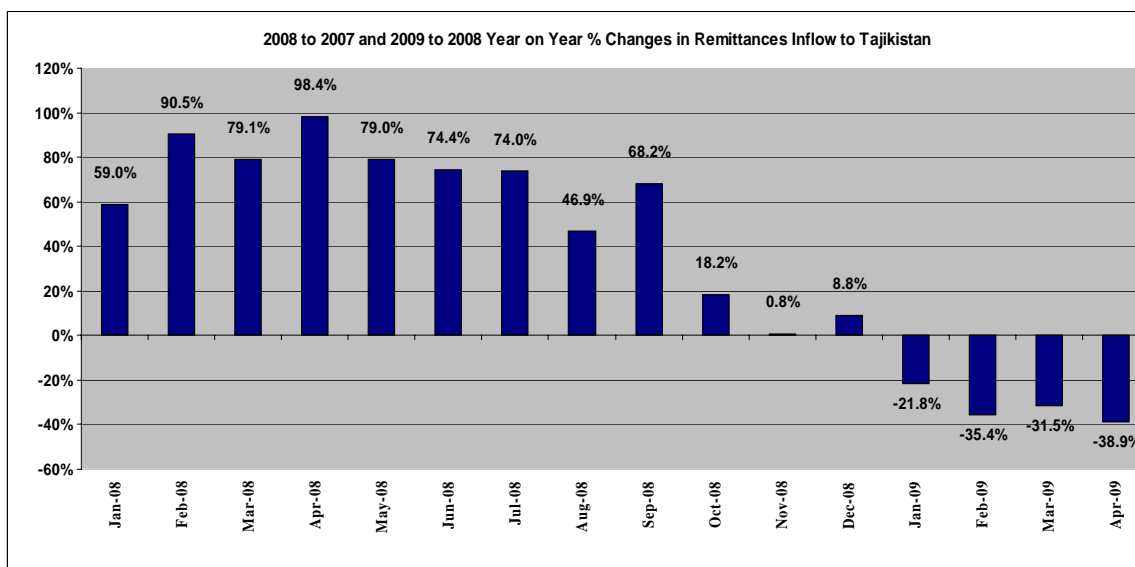
As industrial products (along with cotton) comprise the bulk of Tajikistan’s exports, the declines in industrial production and export prices are having a significant impact on the country’s external position. Foreign trade turnover during January-April has been reported down by some 21 %, with most of this drop attributable to exports (40 % decline). By contrast, the imports only declined by 3 % during this time. The \$452 million trade deficit reported by the NBT for the first quarter of 2009 was some 25% above the deficit reported for the first quarter of 2008—and nearly triple the \$156 million trade deficit reported in the first quarter of 2007.

Remittances

The volume of remittances to Tajikistan over the first 4 months of 2009 dropped by 33 % compared to the same period of 2008—further aggravating Tajikistan’s external vulnerabilities. In April 2009, Tajikistan received about 111¹⁰ million US dollars in remittances, a 39 % drop in year-on-year terms.

⁹ Sughd energy and industries directorate, Khujand, Tajikistan

¹⁰ Data from Mr. Jamshed Yusupov, Deputy Director of National Bank of Tajikistan



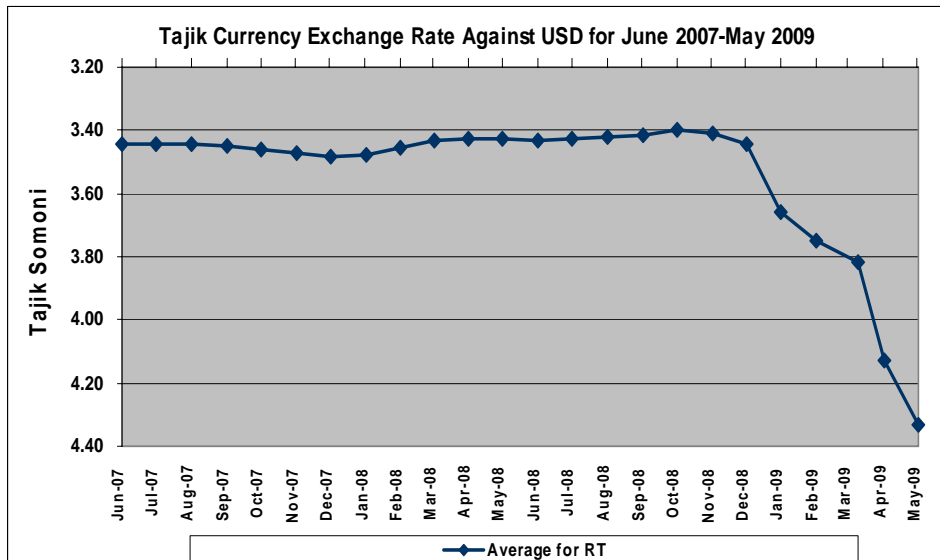
The International Monetary Fund (IMF) expects the volume of remittances to decrease by 30 % in 2009; exports are projected to drop by 7 % in value terms. This is due in part to the recession in Russia, where GDP is projected to drop by 6%. Falling world prices for cotton (which are expected to drop by 23 % this year) and aluminum (by 50%) could push economic growth in Tajikistan towards zero in 2009. Meanwhile, despite strong global deflationary pressures, inflation remains high: consumer prices during January-April were some 10% above year-earlier levels. While the first-quarter monetary growth figures reported by the NBT remain strong, the sharp drops in remittances seem to be tightening credit conditions: many Tajik banks have already started to raise deposit rates and limit credit growth.

Tajikistan's financial system remains vulnerable. As large corporations are drawing down their deposits, some Tajik banks face severe funding problems. Economic slowdown may further deteriorate the banks' asset quality in 2009; Tajik currency depreciation could further add to the problems of the banking sector. To secure macroeconomic stability and economic growth, it is important to push forward the reform of the agricultural sector and to enhance transparency and accountability in the state-owned enterprise sector.

Exchange rate trends

The Tajiki Somoni (TJS) continued to depreciate in May, vis-à-vis both the dollar (by 10%) and the ruble (by 15%).¹¹ The weaker Somoni would seem to be the major reason why inflation in Tajikistan has not fallen faster, despite declines in the prices of the country's largest imports (food and energy).

¹¹ NBT data: www.nbt.tj



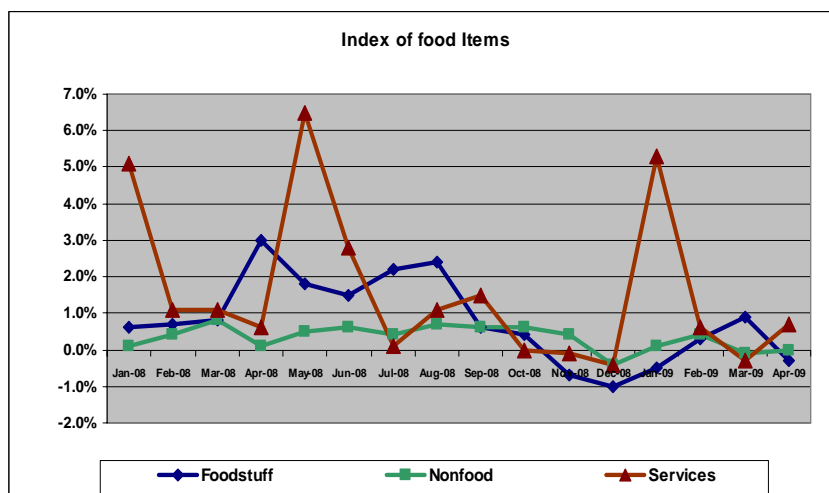
However, the pace of local currency depreciation against USD has diminished, thanks to interventions by the National Bank.

It was reported that on 29 April 2009 the exchange rate for US dollars on the local market fell by 2% against the TJS. Such a fall resulted mainly from the sale of foreign currency by the Central Bank, commercial banks and lending organizations.¹²

Consumer Price Indexes¹³

In the first ten days of May 2009, the world market price for fuel had dropped by more than 61 % compared to the first ten days of July 2008 (the major price hike for fuel in the world market). Such decline in the fuel price on the world market still has positive effects on the CPI of Tajikistan, as the overall consumer price index (CPI) in April 2009 was -0.1 %.

Prices for oil products in Tajikistan depend on contracting arrangements: purchases are based on future contracts and price changes usually occur with two-three months delay. In addition, the Somoni's depreciation continues to push domestic prices up.¹⁴



¹² <http://www2.asiaplus.tj/news/29/50730.html>

¹³ A consumer price index (CPI) is a measure of the average price of consumer goods and services purchased by households. A consumer price index measures a price change for a constant market basket of goods and services from one period to the next within the same area (city, region, or country).

¹⁴ Ibid.

Declining world food prices finally brought some relief to hard-pressed Tajikistan's households in April: a 0.3 % decrease in food prices was reported by the State Statistical Committee for that month. Still, according to official data, food prices during January-April were some 10% higher than they were during January-April 2008.

Overall consumer price index (CPI) in April, 2009 made -0.1%. A decrease is observed for foodstuffs by -0.3% as market price for wheat and fuel decreased in April, 2009. However, an increase in service index by 0.7% is explained by increased tariffs for gas by the end of April, 2009. The index for non-food items remained unchanged from March to April 2009.

From the beginning of the year, the overall consumer price index increase by 1.1%; food and non-food item indexes increased by 0.3-0.4 %, whereas the service price index increased by 6.4 % due to increased tariffs on water, electricity and gas for the past four month of 2009.

Water tariffs

Since the beginning of 2009 water tariffs have increased by 30-50 %, depending on the category of users.¹⁵ New tariffs have been in effect since January 1, 2009 upon the recommendations of the European Bank for Reconstruction and Development. Today, residential consumers pay 0.18 TJS (\$0.04) per cubic meter, and commercial enterprises pay 0.56 TJS (\$0.12). The gradual introduction of higher tariffs is expected to help local water companies to cover their operating costs.

In the meantime, the European Bank for Reconstruction and Development is intensifying municipal operations in Tajikistan by providing a 2 million USD loan for the improvement of the water supply system in southern Tajikistan. The loan will be used for the improvement of water infrastructure of the cities of Kulob and Kurgan-Tyube, as well as Danghara district. This initiative is a follow-up to a previous successful experience of the same organization in the Tajik water sector in Khujand, in the north of Tajikistan.

Electricity tariffs

Electricity rates in Tajikistan are usually increased twice a year – on 01 January and on 01 May. The last increase occurred in January 2009 (25 % for all consumers but TALCO). In May 2009, it was planned to raise the tariffs by another 15 %. However, due to the impact of the global financial crisis, the Tajik authorities have decided to temporarily refrain from raising electricity rates.¹⁶

Although TALCO's electricity consumption has increased to more than 17 GWh¹⁷, considering the sharp drops in world aluminum prices, the Tajik government has decided to leave the electricity price for TALCO unchanged (0.05 TJS per kWh, or \$0.01) in order to support the company's production. The prices for other users are: 0.06 TJS (\$0.01)/kWh for residential customers and 0.14 TJS (\$0.03)/kWh for industrial enterprises; and 0.10 TJS (\$0.04)/kWh for budget-funded institutions.

¹⁵ Rahmat Bobokalonov, Director-general of the State unitary company Khojagii Manziliyu Kommunalni (KMK -- housing and communal services)

¹⁶ From press release of Ministry of Economic Development and Trade (MoEDT)

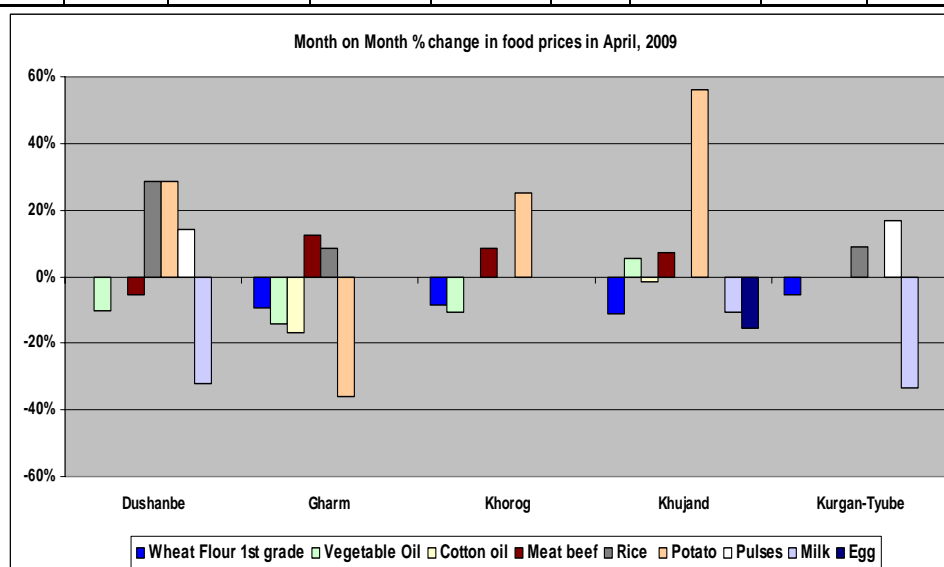
¹⁷ Comments from Sodyk A. Khaitov, Energy Sector Specialist/Consultant, ECA Sustainable Development Department, (ECSSD), The World Bank

V. FOOD & FUEL PRICES

Food prices¹⁸

In April 2009, prices for some major food items have notably decreased. As the table below shows, in most regions of the country market prices have decreased for wheat grain (5-11%), vegetable oil (10-14%) and cotton oil (1-17%). Meanwhile, prices have increased in most regions of Tajikistan for rice (8-to 29%), pulses (14-17%), meat/beef (7-12%), potatoes (25-56%) and milk (10-33%). The price for eggs has increased by 15% only in Khujand.

Month on month % change in food prices in April, 2009									
	Wheat Flour 1st grade	Vegetable Oil	Cotton oil	Meat Beef	Rice	Potatoes	Pulses	Milk	Eggs
Dushanbe	0.0	-10.3	0.0	-5.6	28.6	28.6	14.3	-32.0	0.0
Gharm	-9.5	-14.3	-16.7	12.5	8.3	-36.0	0.0	0.0	0.0
Khorog	-8.7	-10.5	0.0	8.3	0.0	25.0	0.0	0.0	0.0
Khujand	-11.1	5.6	-1.6	7.1	0.0	56.3	0.0	-10.7	-15.4
Kurgan-Tyube	-5.3	0.0	0.0	0.0	9.1	0.0	16.7	-33.3	0.0



The price for wheat has decreased mainly thanks to low import prices. According to the data received from the State Statistical committee of Tajikistan, in April 2009, the price for the imported wheat has decreased by 11 % compared to March 2009.¹⁹

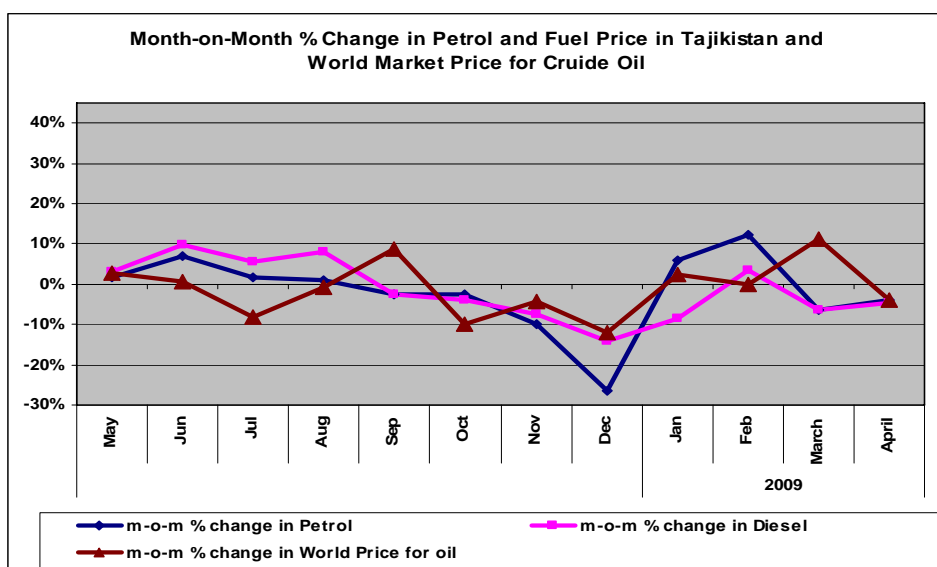
Fuel prices

Towards the end of April, the average price for oil in Tajikistan decreased in line with the world market price. As was observed, the price for oil on the world market has decreased by 3.9 %. The same decrease was seen in price for petrol in Tajikistan, while the price for diesel decreased by 6 %. However, in Tajik currency terms, prices for oil products slightly went up reflecting cost-push effect of the weaker somoni.²⁰

¹⁸ WFP Food Security Weekly Market Monitoring, Tajikistan

¹⁹ Ibid.

²⁰ Comments from Mr. Utkir Umarov, Economist in Poverty Reduction and Economic Management Unit of Europe and Central Asia Region, World Bank



VI. AGRICULTURE

From the beginning of the season up to 15 May 2009, natural disasters have damaged a total of 40 thousand hectares of land, which in monetary terms corresponds to 88 million TJS (more than \$20 million) of losses. Out of this, 22 thousand hectares are cotton fields, 960 hectares are vegetable fields, 221 hectares are potato fields, for almost 8 thousand hectares are grain fields, 718 hectares are cucurbitaceous (melons and similar) fields and 349 hectares are fodder fields. Also, about 3 thousand hectares of garden and slightly over 2.5 thousand hectares of vineyards were damaged. Reportedly, the regions most affected by the torrential rainfalls are Khatlon, with 17 thousand hectares damaged, and Sughd, with 15 thousand hectares damaged.

Cotton fields seem to have suffered the most, as cotton seeds sewn in many locations did not germinate due to weather conditions. In spite of these losses, the 2009 grain harvest is expected to exceed last year's level by some 1 million tons, thanks to the expansion of grain planting.²¹

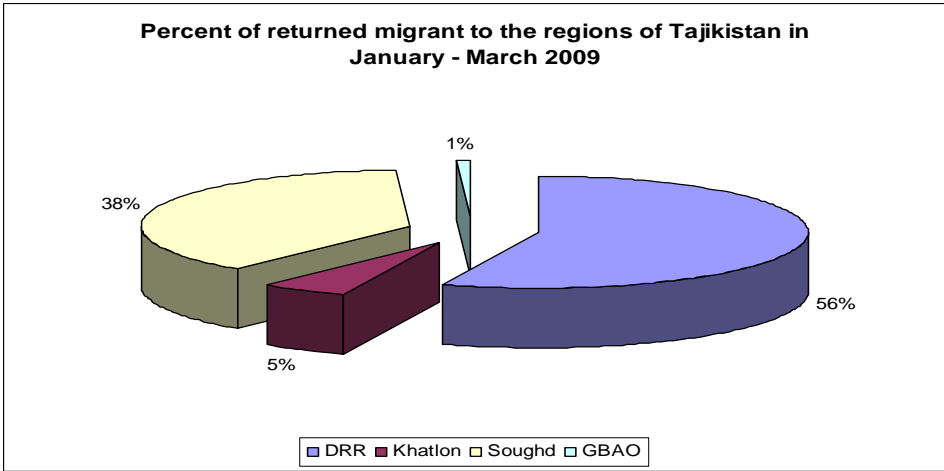
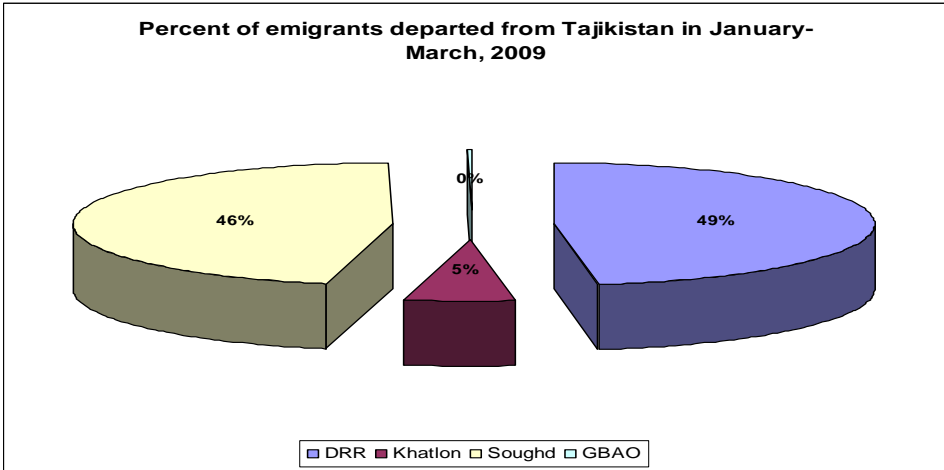
As for locust infestation, as reported in a press release from Ministry of Agriculture, 56,000 out of 132,000 hectares of inspected lands are infected. 44,000 hectares of affected fields have already been treated. However, the Ministry of Agriculture reports that farmers need more tractors, manual spray guns and some 2000 additional workers to fully respond to the locust threat.

VII. MIGRATION

Data from the Ministry of Interior's Migration Department suggest that migrant workers are on balance returning, but that the scale of these net returns is relatively small. During January-March 2009 more than 157,000 people emigrated from Tajikistan, while another 170,000 migrants returned home. The reported difference (13,000 workers) constitutes less than 1% of the 2.1 million people classified as belonging to Tajikistan's labour force.

As shown in the graphs below, most of the people migrating from Tajikistan come from the Directly Ruled Districts (DRD) and Sughd; these regions are also accounted for most of the returnees.

²¹ From the press release of Ministry of Agriculture



Reportedly, for the period of January–March 2009, more than 75,000 people left Tajikistan from the Dushanbe airport; more than 95,000 returned during the same period of time. Almost 73,000 migrants left the country from Khujand airport in Soughd, while 65,000 returned to the country through this airport. For Khatlon, more than 8000 people left and more than 9000 returned. Some 530 people left the Gorno Badakhshan Autonomous Region (GBAO), while more than a thousand returned.