

TAJIKISTAN

Anticipatory: Flooding/landslides in the Rasht Valley (Lakhsh, Tojikobod and Rasht districts)



	Very unlikely	Unlikely	Somewhat likely	Likely	Very likely
Likelihood		X			
Severity/expected impact	X				
Outlook period	July-September				
	Very low	Low	Moderate	Significant	Major

Key findings

Anticipated scope and scale

Flooding, mudslides, and landslides occur in Tajikistan every year, mostly between April and June, affecting on average 5,000-10,000 people. The Rasht Valley is often affected, but with lower humanitarian needs reported compared to other districts, such as Panjakent, in Sughd province and Shugnan, in Gorno-Badakhshan Autonomous Oblast (GBAO).

It is likely that in July-August 2017, floods, landslides, and mudslides will be reported, resulting in damage to agricultural land, livestock, shelters and WASH/health facilities. Across Tajikistan, up to 10,000 people may be affected in the next two months. Infrastructure such as roads, bridges and power lines will also be damaged.

Aggravating factors: Rasht Valley have been severely affected by the economic crisis in Russia, which has resulted in a lower rate of remittances from Tajik migrants. As of Dec. 2016, over 45% of surveyed households in Rasht Valley have faced food insecurity

and are therefore vulnerable to natural disasters and subsequent food losses.

Preparedness and response: The World Food Programme has a three-month food stock it can deliver in a situation of sudden disaster.

Key priorities

- **Food:** Affected households will suffer losses of food stocks, agriculture, and livestock, along with the destruction of food storage facilities. Tajik households heavily rely on livestock. The Rasht Valley faces high level of food insecurity.
- **Shelter:** At least 100 households will have partially or fully damaged shelters.
- **Health:** WASH facilities, including toilets and water pipes, will likely be damaged by floods and mudflows, increasing the risk of waterborne diseases.

Humanitarian constraints

Infrastructure such as roads, bridges and power lines will be damaged, thus temporarily limiting access to the affected areas.

Limitations

- There is no comprehensive and up to date food security assessment available, neither an overview of the WASH situation in the Rasht Valley.
- This anticipatory BN has aimed to focus on the Rasht Valley. However, most of the flooding and landslides have reportedly occurred and/or had a significant humanitarian impact in areas not located in the Rasht Valley.

Anticipated crisis impact

In 2016-2017, the snow season started earlier than usual, from October onwards (RFERL 21/01/2017). Heavy snow during wintertime followed by increasing and warmer temperatures due to global warming will result in a higher rate of melted glaciers and increase the risk of flooding, landslides and mudflows (Al Jazeera 09/10/2016). However, most of the natural disasters hitting Tajikistan such as mudflows, landslides and floods occur during the spring thaw and high precipitation, between April and June (WASH Cluster 2014).

Every year, landslides, mudflows, and flooding affect up to 10,000 people, sometimes leading to temporary displacement of population. The main needs are food, shelter and WASH.

During the last three years, flooding, mudflows and landslides affected all four Tajik provinces, but with more limited humanitarian impact in the Rasht Valley. In late June 2017, 3,800 people have been affected by mudflows in Amondara, Panjakent district, Sughd province. 700 people have been evacuated and are currently hosted by relatives and neighbours (IFRC 10/07/2017). In May 2016, 10,000 people were affected and six people were killed by heavy rains, strong wind and landslides in 16 districts throughout Tajikistan, including Rasht and Tojikobod districts, in the Rasht Valley (OCHA 31/12/2016, REACT 18/05/2016). A total of 5,500 people were in need, mainly in Panjakent district, Sughd province and Rudaki district, Region of Republican Subordination (REACT 25/05/2016). In July 2015, 1,500 people were affected in GBAO due to mudflow, as high temperatures resulted in a high rate of snow melting. Earlier in the same year, 4,700 people were affected by a similar event in Rasht district, and 300 people were displaced (UNICEF 11/08/2015; REACT 29/07/2015). In April-May 2014, 21 flash floods and mudslides were reported, killing 20 people. A total of 7,400 people were affected in 11 districts, including Rasht district, where around 200 people were affected. Rudaki, Region of Republican Subordination and Vose, Kathlon province were the most affected districts (OCHA 29/07/2014).

Food: Food insecurity will likely increase in the case of floods, mudflow, and landslides. Affected households will experience food stock and livestock losses, along with the destruction of agricultural lands, irrigation water systems and food storage facilities. Tajik households heavily rely on livestock as their main source of livelihood, aggravating the impact. Even though food markets usually remain operational in the days after a disaster, affected households have often suffered high financial losses and therefore resort to relying on food assistance (IFRC 10/07/2017). In April-May 2014, 1,200 ha of land were lost and 1,300 livestock heads were killed, mostly in Vose and Rudaki districts. Food

insecurity was further aggravated as floods occurred during the planting season, which runs from March to June (OCHA 31/12/2014).

Shelter and NFIs: Mudflows, floods, and landslides will result in damage and destruction of shelters, and sometimes will lead to temporary displacement of population. As per reports collected since 2015, around 100 houses are severely damaged on average per year (REACT 25/05/2016; REACT 29/07/2015). As water flows may remain significant and further deteriorate the weak and vulnerable river banks, more houses can be damaged in the days following the disaster. This happened in July 2015, in Shugnan district, GBAO (REACT 29/07/2015). The river stream may also change due to a landslide and therefore force relocation of population as their houses become situated in new high-risk areas (REACT 29/07/2015). There is always a need for fuel and water pumps to clear debris and mud (REACT 25/05/2016, REACT 03/06/2016). Affected people are often in need of NFIs, such as cooking devices, wood or gas for food, clothes, and blankets (REACT 29/07/2015).

WASH: A lack of drinking water is reported after mudflows, landslides, and flooding as drinking water systems are often filled by mud and flooded, or destroyed. Therefore, affected people will be in need of water containers, cans, water purification tablets, and any other means to get safe drinking water (REACT 25/05/2016, REACT 03/06/2016). Affected populations sometimes rely on neighbouring villages for water supplies, but access may be hindered due to the disaster. This happened in 2014 in the Kizil-kala village of Kathlon province (IFRC 22/04/2014). WASH facilities are also often covered by mud or destroyed (IFRC 22/04/2014).

Health: The risk of waterborne diseases increases with mudflows, landslides and flooding because the WASH facilities are often non-usable, being flooded and covered by mud and debris, along with the destruction of drinking water system. Removal of debris and mud with limited adequate equipment, often without hand protection, may further increase contamination risks (REACT 25/05/2016, IFRC 22/04/2014; IFRC 10/07/2017).

Education: In the past, there were reports on damaged schools filled with mud and with affected water supply. This happened recently in Amondara, Sughd province in June 2017 (IFRC 10/07/2017, REACT 25/05/2016). However, no impact on school attendance is expected, as the school year ends in May and resumes in September (Education Policy Data Centre 2014).

Impact on critical infrastructure and humanitarian access constraints

Roads, bridges, electricity supply lines and river banks will likely be damaged by floods, mud and landslides. This will further hamper humanitarian assistance. This happened in July 2015, in Shugnan district, in the Gorno-Badakhshan Autonomous Oblast (GBAO), a

mountainous area (IOM 28/07/2015). However, no major humanitarian access constraints were reported in the past during similar events.

In May 2016, several parts of the Dushanbe-Khorog highway have been damaged by mudflows. During one week, Gorno Badakhstan Autonomous Oblast's 230,000 residents could not be reached from Dushanbe (OCHA 30/06/2016). In June 2015, several bridges were damaged in GBAO, mostly in Shugan district. Parts of roads, river banks, electricity supply lines and irrigation canals have also been damaged (REACT 29/07/2015).

Vulnerable groups affected

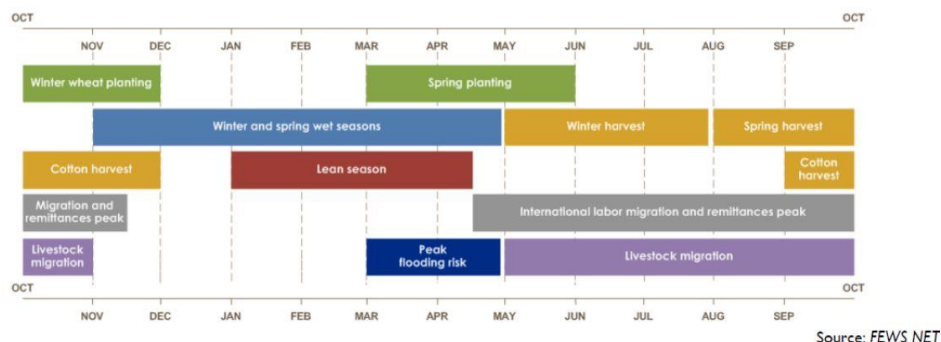
Households headed by women and/or with several children, as well as elderly households are particularly at risk. They would require additional livelihood assistance (IFRC 22/04/2014; IFRC 10/07/2017).

Potential aggravating factors

Seasonal information

The rainy season occurs from December to June and peaks from March to May. Floods are likely to occur from March to August-early September, due to heavy rains and melting glaciers. The lean season occurs from late December to May, whereas harvest takes place from late May to October. Tajik households are particularly vulnerable between March to May when both the lean season and the flooding season are overlapping (WASH Cluster 2014; OCHA 29/07/2014).

SEASONAL CALENDAR IN A TYPICAL YEAR



Source: FewsNet 12/2013

Earthquake

Rasht Valley is an earthquake-prone area. Compounded with unstable ground due to melting snow, an earthquake could trigger a major landslide and significantly increase the humanitarian caseload. On 5 May, a 5-6.0 Richter scale earthquake was reported in the Lyakhsh district, Rasht Valley (News.tj 05/07/2017). In 2012, a 5.7 Richter scale earthquake hit the Rasht Valley, killing two and affecting more than 2,500 people. 86 houses were destroyed and 276 damaged (IFRC 22/05/2012).

Food security

As of December 2016, among surveyed households in Rasht Valley, over 45% reported facing food insecurity (WFP 28/02/2017). According to latest IPC report, released in June 2016 (which may not depict the ongoing situation), over 155,000 people – 34% of the region – in Rasht Valley were facing IPC Phase 3 (IPCInfo 31/05/2016).

One of the main reasons food insecurity was affecting households in Tajikistan was the deterioration of the economic situation in Russia, resulting in less work opportunities for Tajik migrants, and therefore lower level of remittances. Though an improvement of remittances, both in volume and frequencies, has been reported since May 2016, households remain vulnerable (WFP 28/02/2017). As of 2009, an estimated 95% of the Rasht Valley's GDP came from remittances (UNICEF 29/07/2009).

Response capacity

Local and national response capacity

The Committee of Emergency Situations and Civil Defense (CoES) led the REACT, the Rapid Emergency Assessment and Coordination Team, which aims at coordinating disaster response and preparation between humanitarian actors, including local authorities and the Red Crescent Society of Tajikistan (UN Tajikistan).

Removal of debris and mud is often conducted by local authorities and humanitarian partners (IFRC 10/07/2017, OCHA 30/06/2017).

International response capacity

The World Food Programme has been providing food assistance in emergency situations and has kept food stock for three months in case of sudden disaster. WFP distributes food assistance in collaboration with the CoES (WFP 30/06/2017).

UNICEF is providing hygiene kits, water purification tables and information on best practices (IFRC 10/07/2017). ICRC through the German Red Cross has also presence in Tajikistan.

Information gaps and needs

- Sparse information on WASH infrastructures in Rasht Valley.
- Not up-to-date information on food security in Rasht Valley.
- Limited information on humanitarian access...

Lessons learned

- In 2016, thanks to disaster risk reduction awareness activities, coupled with pre-emptive evacuation, the number of people killed and injured due to flood and mudflows was low. Preparation and coordination of response has also allowed quick provision of assistance to those who needed it most (OCHA 30/06/2017).

Methodology

ACAPS anticipatory briefing notes provide a brief outline of the likelihood and impact of a particular crisis or spike in crisis. Likelihood describes the certainty that a particular outcome will happen, and is therefore a subjective measure. The objective of estimating likelihood is to indicate how certain we are that the identified risk will occur. This can contribute to better decision making with regards to preparedness.

Key characteristics

Key indicators	Tajikistan	Lakhsh	Tojikobod	Rasht
Total population	8,330,000	59,200	40,300	111,200
% population in rural areas	26% live in urban areas, 73% in rural areas			
Gender and age distribution of population	<p>Gender distribution: 0.71 male(s)/female (2016 est.)</p> <p>Age distribution:</p> <p>0-14 years: 32.56% (male 1,380,959/female 1,331,790)</p> <p>15-24 years: 19.04% (male 804,625/female 781,469)</p> <p>25-54 years: 39.79% (male 1,640,657/female 1,674,198)</p> <p>55-64 years: 5.37% (male 205,541/female 241,770)</p> <p>65 years and over: 3.24% (male 112,279/female 157,658) (2016 est.)</p>			
State capital	Dushanbe	Jirgatol	Tojikobod	Gharm
WASH figures	<p>Drinking water access: improved: urban: 93.1% of population rural: 66.7% of population total: 73.8% of population</p>		<p>Sanitation facility access: improved: urban: 93.8% of population rural: 95.5% of population total: 95% of population</p>	
Health figures	<p>Under five mortality rate (2015): 45 deaths/1,000 live births</p> <p>Maternal mortality rate (2016): 32 deaths/100,000 live births</p>	<p>Under five mortality rate (2012): 30.1 deaths/1,000 live births</p> <p>Maternal mortality rate (2012): 648 deaths/100,000 live births</p>	<p>Under five mortality rate (2012): 7.4 deaths/1,000 live births</p> <p>Maternal mortality rate (2011): 917 deaths/100,000 live births</p>	<p>Under five mortality rate (2012): 15.5 deaths/1,000 live births</p> <p>Maternal mortality rate (2011): 1,210 deaths/100,000 live births</p>
Food security	19% of the 1,300 surveyed households were moderately food insecure and 3% severely food insecure as of December 2016			
Nutrition levels	8% of children surveyed amongst 1,300 households were wasted, 11% underweight, 33% stunted as of December 2016			
Literacy rates Age 15 and over	<p>total population: 99.8%</p> <p>male: 99.8%</p> <p>female: 99.7%</p>			

Sources: Statoids 2014, Index Mundi, WFP, World Bank Data, Knoema