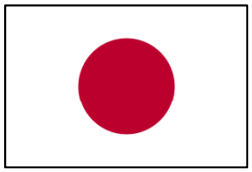

Peer Review in the frame of an implementation of FY2012 ADRC Cooperative Project in Tajikistan

By
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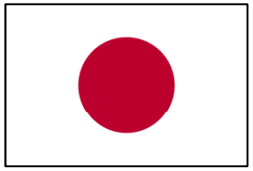
2013/03/04

Peer Review in the frame of an implementation of FY2012 ADRC Cooperative Project in Tajikistan

Purpose: The Asian Disaster Reduction Center (ADRC) dispatches 3 professionals to Tajikistan for the review of the FY2012 ADRC cooperative project in Tajikistan.

Place: Tajikistan, Rudaki District/Dushanbe
Mission Date: 25-27 February



Review Team:
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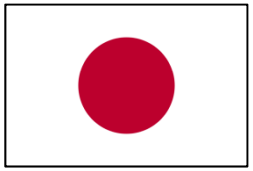

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Review team and the contact person

Peer Review in the frame of an implementation of FY2012 ADRC Cooperative Project in Tajikistan

Overview:

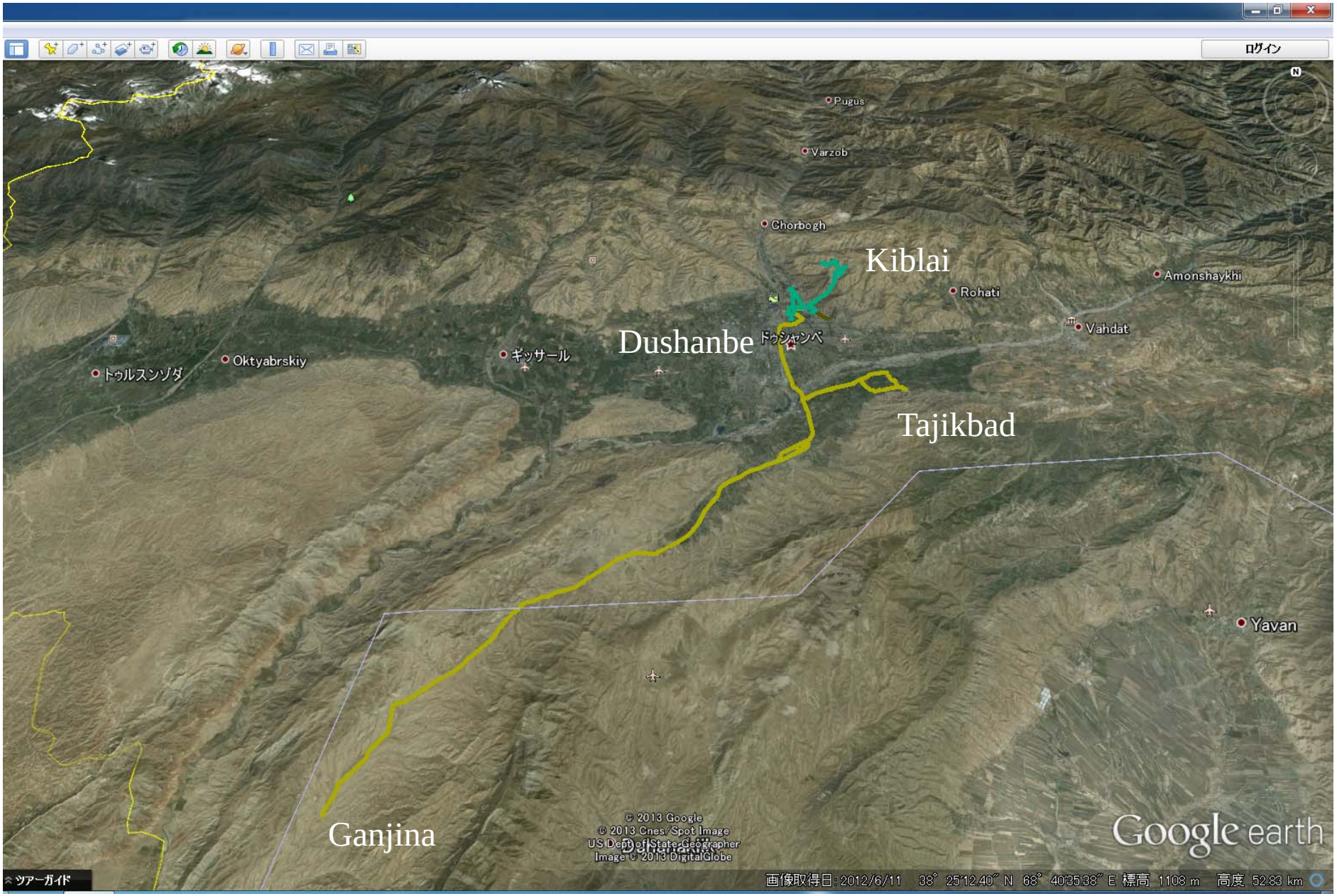
Tajikistan is a republic country. The capital is located in Dushabe. The area is 1431000 m^2. The population is 7.5 million. The ethnic group consists of 80 % Tajik, 15.3 % Uzbek, 1.1 % Russian and others. Tajikistan has been suffered from various disasters such as flood, mudflow, landslide, earthquake, avalanches etc. The country is occupied by mountains by 93 % where the highest elevation reaches even around 7000m. From its landscape, mudflow and landslide in/from the mountain area are critical problems in regard to the rainfall-induced disaster. In this visit, the interviews are carried out to national/local authorities and geology professionals focusing on the landslide/mudflow. Several vulnerable sites for the landslide/mudflow are also visited.

The Water Resources Department/hydrologists/hydraulic engineers are not included in the interview so that little attention is needed for the comprehensiveness of the interviews.

Schedule for Peer Review in the frame of an implementation of FY2012 ADRC Cooperative Project in Tajikistan

Time	Activity	Responsible
February 25		
10:00-11:00	Visit to UNDP DRMP office	Research Center of State Committee for Land Use and Geodesy (RC SCLUG)
11:00-13:00	Visit to Office of FOCUS Humanitarian Assistance	RC SCLUG
13:30-15:30	Visit to Kiblai vulnerable site	The Authority of Rudaki
February 26		
9:30-10:30	Meeting with the Authority of Rudaki district	RC SCLUG and The Authority of Rudaki district
10:30-12:00	Visit to Tajikbad vulnerable site	The Authority of Rudaki district
13:00-16:00	Visit to Ganjina vulnerable site	The Authorty iof Rudaki district
February 27		
8:00-9:00	Meeting in the Main Geology Department	RC SCLUG
9:00-10:30	Meeting in the Institute of geology and seismic engineering and seismology	RC SCLUG
10:45-13:00	Meeting in Research Center of SCLUG	RC SCLUG
14:00-16:30	Workshop in RC SCLUG to exchange findings and opinions	RC SCLUG and Focus

Visited vulnerable sites during 25-26.02.2013



Visit to UNDP-DRMP office

UNDP DRMP: United Nations Development Program Disaster Risk Management Program

Efforts: Committee of Emergency Situations and Civil Defence (CoES) & UNDP Tajikistan are managing “Disaster Risk Management Programme Phase III (2010 – 2015)”

Strengthening: The DRMP is managed with the strong cooperation between CoES and UNDP Tajikistan. UNDP Tajikistan consists of international experts both from Tajikistan and other countries. Thus, the staff members understand both the local and international situation well.

Weakness: In Tajikistan, the floods are constant annual problem. According to the interview, the problem when taking the counter measures against flood exist not in the knowledge about floods itself, but rather in non-proper coordination among the stakeholders (e.g. the Hydrometeorology Agency, Ministry of Water Resources, CoES, etc.).

Recommendations: It is expected that the DRMP project becomes a milestone for the good cooperation among stakeholders. UNDP is also expected to convey the international views to Tajikistan people.

Visit to Office of FOCUS Humanitarian Assistance

Efforts: Focus is a NGO. Many community level/grass root projects for mudflow/landslides are managed by Focus. They have know-how how to make qualitative hazard Map and partially GPS based quantitative hazard map.

Strengthening: The Focus humanitarian Assistance has already a lot of know-how how to carry out the community level flood disaster management fitting to the situation of Tajikistan. Focus stands by the local people and understands the needs of them.

Weakness: The approach taken by Focus looks very good especially considering the situation of Tajikistan. However, from Japanese perspective, we expect further development of the risk assessment technology based on the state of art research.

Recommendations: For example, SATREPS project
http://www.jst.go.jp/global/
could be one of the possible research funds which could offer Focus more scientific background in their hazard maps.

Visit to Kiblai vulnerable site

Problem: Severe landslides are happening in the large area of Kiblai Jamoat, Rudaki district. In addition, there is possibility that the mud flood in the region may reach to the downstream Dushanbe area.

Efforts: The seriousness of landslide in the Kiblai vulnerable site is properly recognized. The relocation of the villagers are encouraged by the government using the subsidiary, loan, etc.

Strengthening: The governments recognizes that the resettlements or any other countermeasures in the region are necessary.

Weakness: The effort for monitoring the situation is stopped. However, monitoring the situation is one of the most important activities for the mitigation of the mudflow/landslide disasters.

Recommendations: Most probably, it is not cheap to take hard countermeasures on the Kiblai site. However, to get the funding for the monitoring could be possible. To understand the situation of the site by scientific monitoring is very important as already recognized by the Tajikistan authority. Moreover, the disaster education on the local people is expected more. The villagers do not like to resettle because of their strong affection to their born land. However, people are apparently at risk so that the education on them must be considered more.

Meeting with the Authority of Rudaki district

Efforts: According to Mr. Ismatov, the vice chairman of the district, the flood is considered one of the biggest challenges for the Rudaki people. Basically, the mudflow is one of the biggest flood problem in the region. The district tackle with this problem in cooperation with national governments and local people considering that the problem is for all the people.

Strengthening: The Rudaki district has good relation with the national government and local people. For example, they held the special training for the disaster mitigation with CoES in 2010. The next training workshop is planned in 2013. The local people devote themselves for preventing the mudflow disasters.

Weakness: The district recognizes what are the problems in regard to floods. They have also some idea how to prevent it. However, the budget is not enough to carry out their ideas/measures. The district does not have, for example, money for the bank reinforcement.

Recommendations: Soft measures like disaster education should be tried further considering the situation that the budget is limited. The preparation of hazard maps are considered one such activity. ADRC is expected to help such activities. Moreover, further education on the Tajikistan young generation is expected. Young experts have good capability for computers. If they are properly educated at e.g. a Japanese University, they can make the hazard map with relatively low prices. They can also work for the disaster education. Young motivated expert should be brought up.

Visit to Tajikbad vulnerable site

Situation: In Tajikbad village, there is a hill which is the source of mudflows. The soil of the hill is eroded due to the strong rainfall. The flow in the end goes down to the Tajikbad settlements.

Efforts: The authority recognizes the problems and understand the basic mechanisms of the disaster.

Strengthening: The village people are making, for example, mudflow diversion channels, mud control dams by themselves though those are broken once the mudflow occurs. In other word, the effect of those measures are limited and the villagers give up making them in the end. The villagers do not sleep when raining strongly. They make the shift and carry out the monitoring when dangerous.

Weakness: A solution which can be considered is that the villagers do not live there. But this is not the realistic solution for the villagers, because they do not have enough money for the resettlement. They are too poor to move. Also, it is not realistic for them to leave their properties by leaving.

Recommendations: To understand the situation of the vulnerable site quantitatively is important. Scientifically sound monitoring of the rainfalls, the movement of the land, etc. should be carried out. The risk situation is not always sure without the objective data. If those objective data imply us that the problem cannot be solved with the current budget limitation, then the villagers have to resettle for their lives

Visit to Ganjina vulnerable site

Situation: In the Ganjina village, the bridge and some houses in the village are flashed out by the mudflow due to strong rainfalls during the rainy season on March and April.

Recommendation: The things which have to considered are mostly the same as the Tajikbad vulnerability site in the previous slide. Especially, the rainfall intensity has to be monitored around the area, otherwise it is difficult to know the situation properly. As hard counter measures are not expected in the very short term, the monitoring and the soft measures based on the monitoring are necessary.

Meeting in the Main Geology Department

Efforts: According to the interview to Mr. Bahtdavlator Rahmonbek, the Department of Geology, the Department is responsible for all the risk assessment related to the disasters caused by geological reasons. They also have the database in paper. The exploitation of natural resources is also their responsibility.

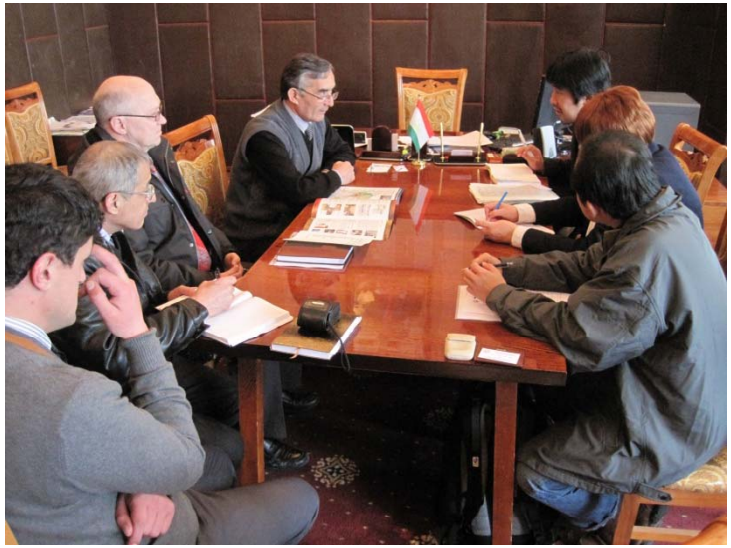
Strengthening: In the soviet union time, the budget for the regular geological survey was allocated. The comprehensive survey was carried out and the survey results are preserved in the paper form. By this, they have the geological risk information all over Tajikistan. According to the interview, if the citizen visits the department, they respond. If the villagers are very in danger because of the landslide/mudflows, they recommend the resettlement. The staffs of the department have geology background from their education so that they understand the risk situation very well.

Weakness: After Tajikistan independence, the budget for the regular survey was lost. Thus, the information is not renewed regularly recently. In addition, the database is in the paper form so that they want a project for the digitization of the paper. They raise the name of JICA for the digitization matter.

Recommendations: The interview gave us the impression that the department staff are well trained in geology. They have also the database related to geology problems of Tajikistan, though it is not always renewed recently. They need the regular budget for continuing the past continued activities.

Meeting in the Institute of geology and seismic engineering and seismology

Efforts: The Institute was established in 2011 by combining two institutes, Institute of geology and Institute of Seismology. They have 10 scientific laboratories and 4 technical units. There are 178 staff members.



Strengthening: The Institute consists of scientific/engineering professionals. They have cooperation with researchers of China, Germany, Norway, France, USA, Russia, Kirgiz and other countries. It seems that the earthquake research is strong.

Weakness: The institute is a good research institute. It seems that there are many excellent researchers. However, for the Ph.D, according to the interview, Tajikistan people generally first carry out there Ph.D research after Master degree and the Ph.D dissertation is accepted by Russian counterpart. If the country have their own Ph.D system, that would be more the strength.

Recommendations: From the history, the institute people can speak Russian, one of the UN languages. However, most of other country professional need to communicate them in English. I wish the Institute opens the door also for Japan by using English.

Meeting in Research Center of SCLUG

Efforts: RC SCLUG has carried out very nice qualitative mudflow/landslide hazard mapping using partially the budget of ADRC. RC SCLUG consists of 3 laboratories. There are around 20 staff members.

Strengthening: RC SCLUG have obtained the know-how how to make the narrative based (or qualitative) mudflow/landslide hazard maps. They have chosen around 20 settlements in Rudaki District and carry out the risk assessment by communicating the leaders of those settlements.

Weakness: RC SCLUG have done what is possible now, i.e. making the qualitative hazard map. As the next step, it is expected that more scientific aspect is added to their hazard map. But the necessity was mentioned by Mr. Alisho, RC SCLUG. Thus, they recognize what needed. Also, my impression was that 20 staff members are not necessarily enough.

Recommendations: It is worth noting that they have applied to ADRC funding, received it and carry out the risk assessment of 20 villages. Such effort is expected to continue further. I would encourage RC SCLUG for the continuous challenges. One request maybe that they should organize the presentations of their activities better using like Powerpoint, otherwise people may underestimate their achievement.

Overall Review at the Workshop

Current Efforts in Mitigating/Reducing Risk on Flood Disasters. Especially in the field of Risk Assessment & Hazard Mapping:

The governmental bodies such as the Authority of Rudaki district, RC SCLUG, the international organizations such as UNDP and the NGOs (e.g. Focus humanitarian activities) are doing their best on each level for the flood/landslide disaster mitigation. The cooperation among them and the stakeholders are also well seen by the interview. Many of the stakeholders well understand the disaster situation of their country. They carry out the risk assessment now qualitatively/partially-quantitatively and are preparing the hazard map. It seems that the biggest problem lies in the budget constraints. They do not have enough money to further carry out the scientific risk assessment. Needless to say, taking hard countermeasure (e.g. bank enforcement, mud control dam etc.) is more difficult since it is generally much more expensive. The urgent/emergency risk management by qualitative hazard mapping (by e.g. RC SCLUG/Focus) is the activities of the current stage in the country.



Overall Review at the Workshop

Strengthening:

The Tajik professionals recognize disaster problems and understand the basic mechanisms of the disaster. Some pilot projects, grass-root/community level activities already show some successes for the disaster mitigation. For example, RC SCLUG/Focus have already some cases of qualitative/partially-quantitative land slide/mud flow hazard mapping. The villagers also try to protect their properties by making the mud control dam, mudflow diversion channels, etc. by themselves. In other word, the villagers do recognize the risks. According to the Rudaki district/Department of Geology, Tajik people band together at the emergency situation. This is, according to them, the culture of Tajikistan. These positive attitude is considered the strength of Tajikistan. Also, the researchers of the Institute of geology, earthquake engineering and seismology, Academy of Science and RC SCLUG are motivated and have good potential.

Points to Be Considered for Further Improvement:

The local vulnerable people needs the emergency response since the risk is exactly in front of them. However, to correct the objective data (e.g. rainfall, land movement, river water level, discharge, land use, soil type etc.) in addition must be considered more seriously. If those data already exists from Soviet Union time, it should be digitized as indicated by the Department of Geology (DoG). DoG expresses their interest to JICA for this matter. Moreover, though authorities can explain what is happening in their land and they understand basic mechanisms of the disaster, the outside experts can not properly understand the situation since those data or documentation are not often indicated.

Overall Review at the Workshop

Finding and Recommendations of Reviewer:

The recommendations are summarized as follows;

(1) To obtain the understanding of the international society as well as the funding, Tajikistan needs to estimate the number of villages/people at risk even roughly. Also they need to estimate the amount of budget they need, first of all, for the soft measures as the hazard mapping project of RC SCLUG. It seems that taking the hard countermeasure budget (e.g. bank enforcement) for large region of Tajikistan at risk is not so easy, thus the soft measure activities are needed.

(2) Making hazard maps, firstly by possible ways such as the example of RC SCLUG and Focus is important. In the later stage you can think of more scientifically elaborated hazard map.

(3) More effective and wide hazard map distribution like in the developed countries should be considered more.

(4) Though the hazard mapping activity focuses on initiative persons of the villages, carrying out the disaster education on children is sometimes considered more effective. There is an instance in Japan that children behave sometimes more properly than adult in the disaster situation.

(5) After the emergency countermeasures such as the hazard mapping based on narrative methods, the collection of objective/scientific data by regular monitoring (e.g. rainfall, land movement, river water level, discharge, etc.) should be considered more seriously. This is necessary for the future forecasting challenges. Note is that the partially quantitative hazard mapping based on GPS is carried out by Focus.

(6) The cooperation with meteorologist and hydrologist was not shown to us this time. The rainfall information is very important for the prevention of the rain-induced mudflow and landslide.

(7) The evacuation exercise should be done in many villages periodically.

(8) Fund raising is important for the disaster mitigation by finding the occasion as ADRC this time. SATREPS, e.g. is a chance which can enable some scientific activities for the disaster mitigation.

(9) Tajikistan should give more opportunity of the higher education on young motivated Tajik citizen at Universities. This may in the future reduce the cost necessary for, e.g risk assessment, hazard mapping, disaster education especially regarding the matters requiring computers. Educated Tajikistan young will work much better than the outside expert who does not know Tajikistan well.

(10) Reflection of past reviews is needed as much as possible (e.g. by ADRC last time). Tajikistan need to have, what is called, PDCA (Plan, Do, Check, Action) cycle, i.e. the adaptive management.

(11) They need to make the materials for the better recognition of the international society about the disaster problems of Tajikistan. More record, photo and data accumulation are needed. The release in English also should be considered more seriously in the future.

Thank you very much for your help during our stay in Tajikistan