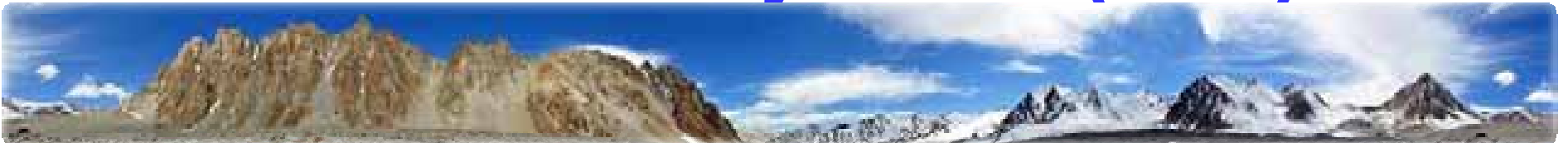


Main Department of Geology
under the Government
of the Republic of Tajikistan

South Hydrogeological Expedition
Juraev R. U.

Studies on Exogenous Geological Processes in the South of Tajikistan (EGP)



- South Hydrogeological Expedition (SHGE) is based in Vakhdat city.
- Area of activities – Districts of Republican Subordination, Khatlon province, GBAO.



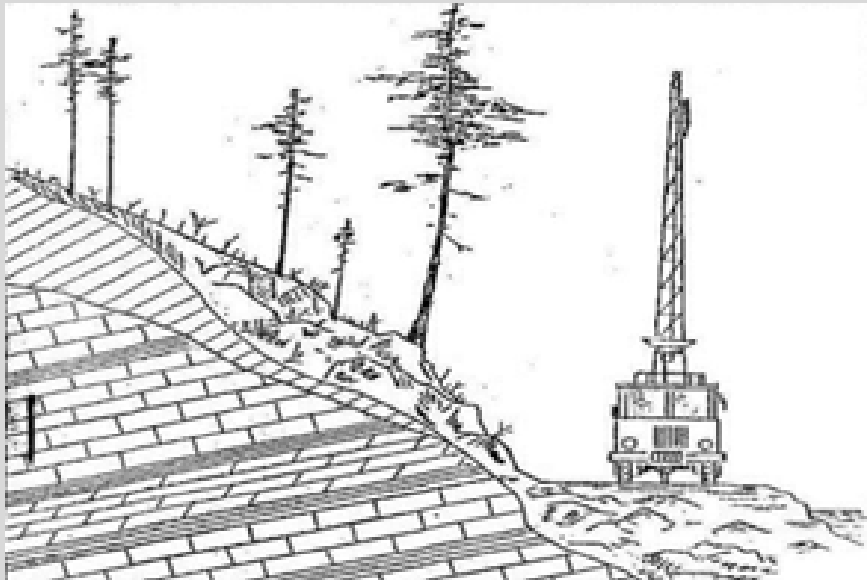
Main studies on EGP

Key tasks:

1. Identifying and registering hazardous EGP, hazard pre-assessment and risk level rating for residential areas and other infrastructure.
2. Regular surveys of known hazardous areas to assess their status.
3. Elaboration of expert conclusions on slopes stability status and recommendations on potential hazards prevention.
4. Methodological consultations and surveys to monitor hazardous locations.
5. Detailed engineering-geological studies within the areas of hazardous EGP
6. Regular monitoring at special testing grounds. Design and introduction of automated information retrieval system for EGP data processing

Working Methodology:

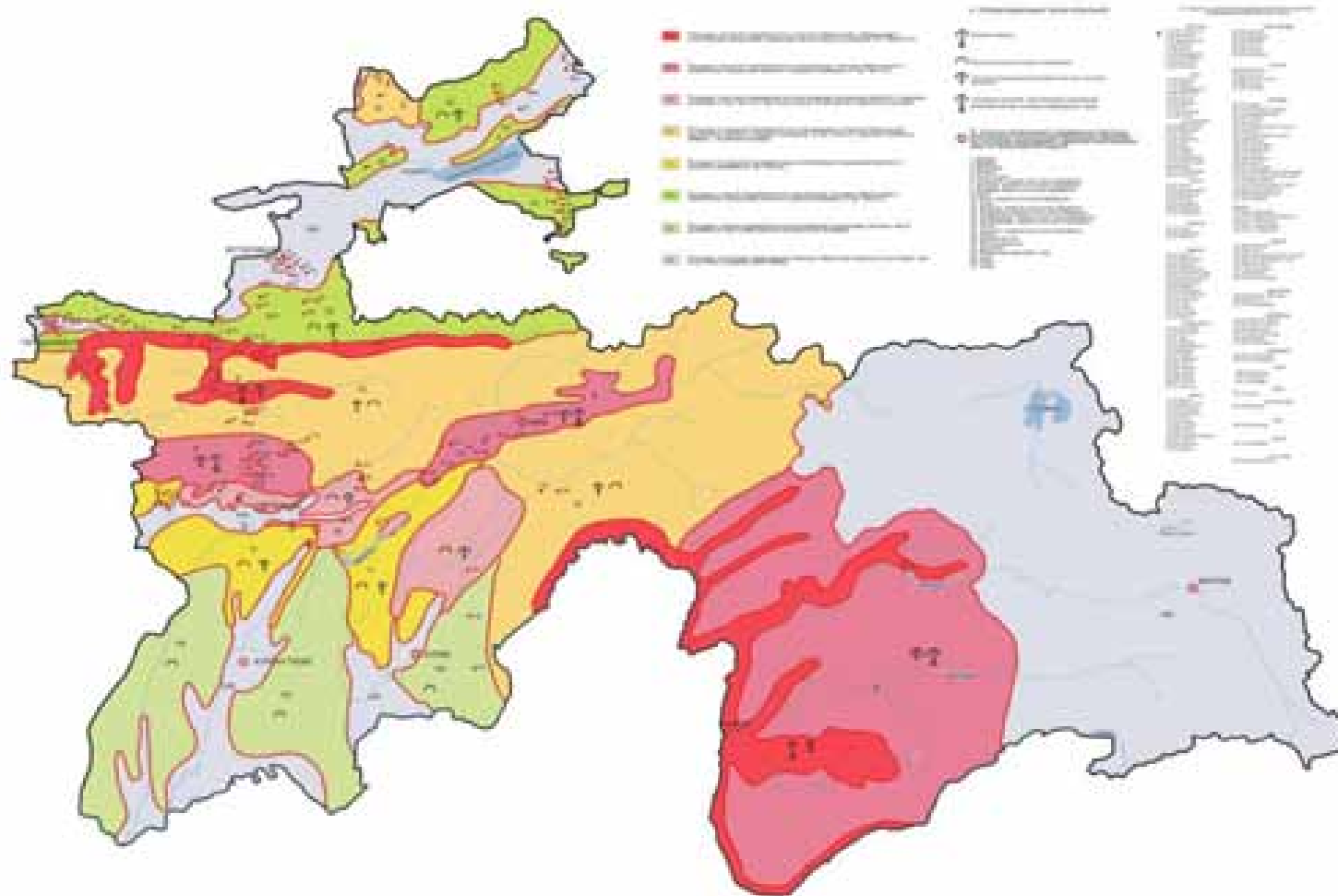
- Visual surveys of EGP formation areas
- Detailed engineering-geological surveys (1:5000-1:10000)
- Tool monitoring investigations of changes in geological environment in specific landslide areas



Study outputs:

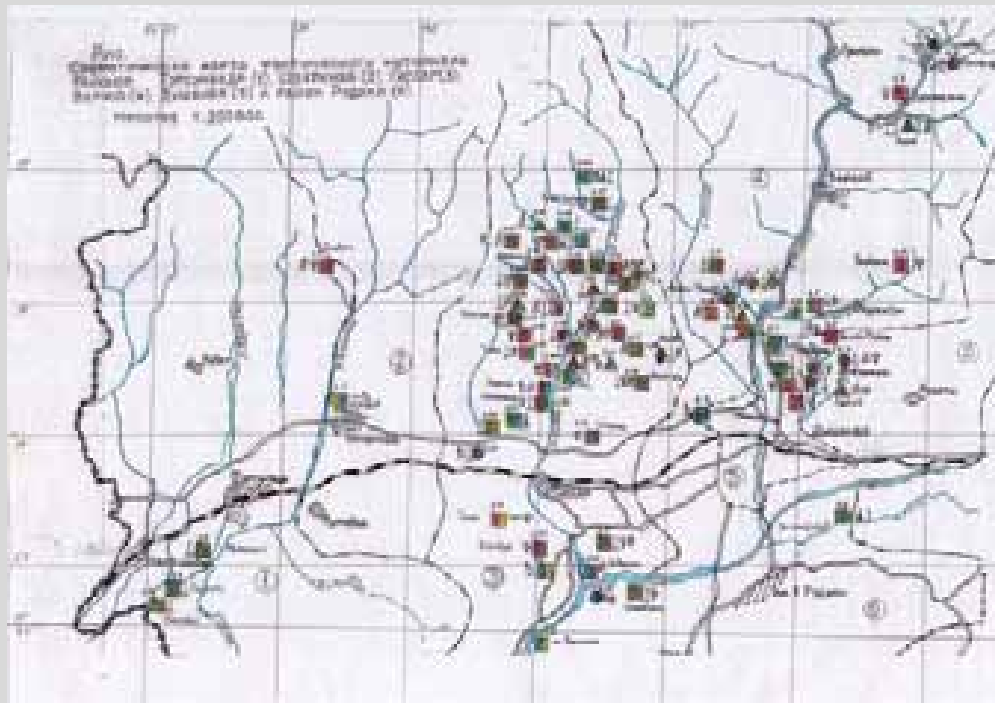
- Developed catalog of landslides and mudflows (up till 2010), with separate data on EGP in each administrative district of the Republic;
- EGP evolution maps (1:200000) for different administrative districts, susceptibility maps
- EGP susceptibility maps with indication of impact on infrastructure (1:500000)

Schematic map of Tajikistan Districts Level of susceptibility to landslide and rockslide processes



Main working studies on EGP

Such studies in 2004-2009 had covered more than 1,000 facilities, and 2,142 households had been recommended to re-settle from the areas at risk.





On-site landslide monitoring stations

13-Jan-11



Kul Landslide

13-Jan-11



Kul Landslide.
Watercourse stopped and 100m-long lake formed



Landslide resulting in road blockage.
Kalai-Nav village.

13-Jan-11



Formation of landslide
in Surhob river valley (Rasht district)



Dakhana village.

Riversides destroyed by debris flows

Future plans:

- ❖ Identify and study potential areas for ES.
- ❖ Prepare GIS-based susceptibility maps of settlements and infrastructure.
- ❖ Develop and introduce automated information retrieval system for EGP data processing

Thank you for your attention!!!