



Capacity building training on the use of cloud-based platforms to support the adoption of the Pilot Central Asia Drought Information System

Bishkek, Kyrgyzstan

24-28 April 2023 (tbc)

Venue: Ministry of Emergency Situations of Kyrgyzstan (tbc)

Background:

Among natural disasters, droughts get relatively less attention from policymakers, even though they have serious long-term socioeconomic impacts. Drought adversely affects sustainable development and exacerbates poverty for millions who depend on land as a source of livelihood. Asia has had the largest number of people globally affected by droughts in the past three decades. Many Central Asian countries suffer from frequently occurring droughts, which are related to water resource availability and management and result in crop failures and increase in food prices.

As a slow-onset disaster, the use of space technology and Geographic Information Systems (GIS) applications can be particularly effective in drought preparedness and impact mitigation. However, despite the significant progress achieved in this region, space technology and GIS applications continue to be underutilized, primarily because of the lack of capacity in terms of human, scientific, technological, organizational, and institutional resources.

The CADIS project, implemented by the United Nations Economic and Social Commission for Asia and the Pacific and sponsored by the Russian Federation, aims to address the "monitoring and prediction" component of the drought management cycle. The project's



key objective is to strengthen the capacity of target Central Asian countries to use satellite data and geospatial information for effective drought monitoring and early warning so that those countries can access the pilot drought information system.

This capacity-building training is being organized to design the draft plans to build and operationalize the CADIS and develop the capacity of professionals at the Kyrgyz Ministry of Emergency Situations to use cloud computing platforms to compute drought-related indices. ESCAP will also facilitate bilateral discussions between Kyrgyzstan and Russian Federation on the sidelines of the training to enhance the uptake of wildfire monitoring capabilities provided by the Scientific Research Center "Planeta".

Objectives:

- Develop a draft plan in coordination with the Ministry of Emergency Situations to operationalize CADIS.
- Facilitate the discussion and possible agreement between the Ministry of Emergency Situations of Kyrgyzstan and the Scientific Research Center "Planeta" regarding the provision and maintenance of the "Wildfires in the Kyrgyz Republic" GIS portal.
- Increase the capacity of regional stakeholders and MES experts to perform drought index analyses using the Google Earth Engine platform.

Expected Outcomes

- Enhanced capacity of national emergency, meteorological, environmental, land management and space-related agencies or ministries, as well as relevant research institutions in Central Asian countries, to operate and maintain the drought information system.
- Officials of MES Kyrgyzstan have gained hands-on experience with ad hoc satellite imagery analysis for drought monitoring through a series of face-to-face exercises with the Google Earth Engine platform.

Venue and Date/Time

Head office of the Ministry of Emergency Situations of Kyrgyzstan

Organizers

United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

Ministry of Emergency Situations (MES) of Kyrgyzstan



Participating Countries and corresponding stakeholders

Russian Federation

1. Scientific Research Center "Planeta"
2. ScanEX

Kyrgyzstan

1. Ministry of Emergency Situations (Emergency Monitoring Department and Kyrgyzhydromet);

Other stakeholders in Kyrgyzstan (for the Google Earth Engine training):

2. Ministry of Agriculture
3. Water Resources Service under the Ministry of Agriculture
4. Land Resources Service under the Ministry of Agriculture
5. Forest Service under the Ministry of Agriculture

Draft Programme

Day 1, Monday (24 April 2023)

- Ministry visit (Emergency Monitoring Department, Kyrgyzhydromet office)
- ESCAP-MES project planning session
- Preparations of the training facilities

Day 2, Tuesday (25 April 2023)

- Brief demonstration of the wildfire portal
- Discussions of the wildfire portal development discussions on its continued support after the completion of the CADIS project
- Meeting of the Deputy Minister of Emergency Situations with the ESCAP IDD Director and the Director of SRC Planeta
- Adoption of the project plan

Day 3, Wednesday (26 April 2023)

- Use of Google Earth Engine for Drought Monitoring

Day 4, Thursday (27 April 2023)

- Use of Google Earth Engine for Drought Monitoring

Day 5, Friday (28 April 2023)



- Use of Google Earth Engine for Drought Monitoring

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