

















Online 11th Central Asian Leadership Programme on Environment for Sustainable Development (CALP) held in Almaty, Kazakhstan, from 14 to 18 September 2020.

The programme was organized in cooperation with UN Environment Programme, OSCE Programme Office in Nur-Sultan, US Agency for International Development (USAID), World Bank and UN Development Program (UNDP).

The 11TH CALP was mainly focused on environmental innovations and transboundary water and climate issues including disaster risk reduction, including the corona virus pandemic and its impact on the development of Central Asia and Afghanistan. The lectures provided latest innovative solutions to environmental challenges on national, regional, and global levels.

The overarching goals of the 11TH CALP are to build collective leadership capacity, strengthen environmental volunteering, expand participants' networks, increase the role of youth in transboundary water and climate cooperation in Central Asia and Afghanistan, and provide an innovative and action-oriented regional platform for youth dialogue.

Among the CALP participants were representatives of the state, academic and civil society sectors. Separately, it is worth noting that the CALP graduates are actively involved into activities in the field of environmental protection and sustainable development. This contributes to strengthening the role and voice of young professionals in regional cooperation.

On 18 September 2020, ICARDA specialists presented Central Asian Climate Information Platform (CACIP), its main benefits and functionality. The participants got to know how to make their organization more visible, to use CACIP tools, to develop Agrometeorological bulletin and to promote their own learning course. During the interactive session the participants trained to build multilayers maps with the own data.

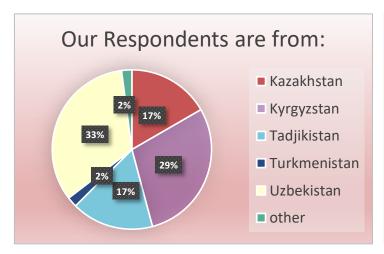
CACIP FEEDBACK SURVEY

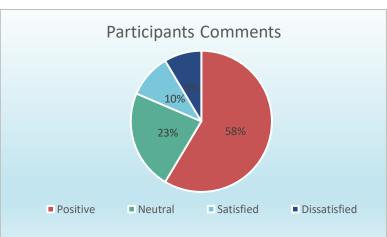


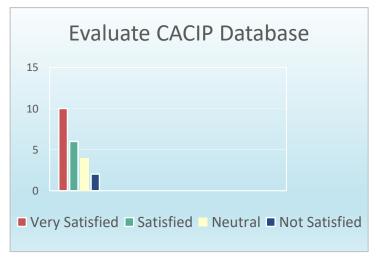
Sent on July, 16th & August 31st

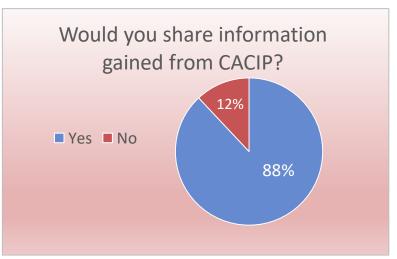
Successful deliveries: 280

Openings: 258









The express survey was conducted within the framework of the Climate Adapation and Mitigation Program for Aral Sea Basin (CAMP4ASB) Project funded by the World Bank. The survey objective aimed to test the Central Asian Climate Information Platform (CACIP) that will allow to create a transparent database for planning and implementing climate change adaptation efforts in Central Asian countries. The survey results demonstrate how convenient and informative CACIP is for regular users and what further improvement the database needs. The comments collected within the survey underwent aggregated processing and will be used to improve CACIP functionality and design. The updated version of CACIP will be introduced in October 2020. Stay tuned!



Earth Map is an innovative, free and open-source tool developed by the Food and Agriculture Organization of the United Nations (FAO) in the framework of the FAO - Google partnership. It was created to support countries, research institutes, farmers and members of the general public with internet access to monitor their land in an easy, integrated and multi-temporal manner. It allows everyone to visualize, process and analyze satellite imagery and global datasets on climate, vegetation, fires, biodiversity, geo-social and other topics. Users need no prior knowledge of remote sensing or Geographical Information Systems (GIS).

Its features are based on <u>Google Earth Engine's</u> big data capabilities, allowing users to undertake complex analysis of earth observation, environmental and climate data in a simple manner.

Earth Map's data is divided into thematic groups (Climate, Geosocial, Vegetation, Land Degradation Neutrality, Water, Satellite images, Land maps, Forestry, Fire, Geophysical, Soil and Biodiversity) and allows the user to visualize layers (maps) and to generate statistics to describe the areas of interest. Some of these layers (such as the European Space Agency's Climate Change Initiative Land Cover, the Global Forest Change tree cover loss, I Nightlights, and others) allow users to access multiple time periods. Earth Map thereby gives users both a temporal (accessing time series data) and a spatial (visualizing maps) perspective to their areas of interest.

Its features are based on Google Earth Engine's big data capabilities, allowing users to undertake complex analysis of earth observation, environmental and climate data in a simple manner.

Google Earth Engine (a cloud service with access to petabytes of information) gives Earth Map the capacity to run statistics on the fly on several metrics like temperature, precipitation, burned areas, tree-covered area, among others. These statistics can be executed on any device in a matter of seconds, regardless of the device's computational power. Statistics can be aggregated at different time frames (yearly, monthly averages and monthly time series) and different time periods.

Google Earth Engine is a geospatial processing service. With Earth Engine, you can perform geospatial processing at scale, powered by Google Cloud Platform. The purpose of Earth Engine is to:

- Provide an interactive platform for geospatial algorithm development at scale
- Enable high-impact, data-driven science
- Make substantive progress on global challenges that involve large geospatial datasets

Tools on CACIP

SOILGRIDS

Soilgrids is a system for digital soil mapping based on a global compilation of soil profile data (WoSIS) and environmental byers.

SoilGrids is designed as a globally consistent, data-driven system that predicts soil properties and classes using global covariates and globally fitted models. If you are looking for soil information on national and/or local levels we advise you, before using SoilGrids, to compare SoilGrids predictions with soil maps derived from national and local soil geographical databases. National soil maps are usually based on more detailed input soil information and therefore are often more accurate than SoilGrids (within the local coverage area). For an overview of national and regional soil databases, please refer to the Soil Geographic Databases compendium.

The selection of soil profiles underpinning SoilGrids is larger than the publicly available set ('wosis_latest') displayed here (for details see the ESSD paper). The actual number of observations for each property varies (greatly) between profiles and with depth, generally depending on the objectives of the initial soil sampling programmes. National soil survey organisations will generally maintain a wider selection of soil profiles/properties for their country in their databases.





1. Is using CACIP free?

CACIP relies on open access and free online resources, hence, all CACIP products are free of charge.

2. What can I do if data I need is not provided by primary source for free?

CACIP may find climate related resources, which are not free. In this case, it redirects the users to the original source for communicating directly with the data provider.

3. What are the rules to use, copy, and reproduce data from CACIP?

All efforts are to make CACIP as open as possible. The Knowledge Hub gives all users the full permissions to find, download, and visualize (if available) open data/knowledge products. For the data, which is not free, some functionalities like downloading could be disabled).

4. What are the sources of data and information in CACIP?

The Platform obtains (harvests: to collect large quantities of information, especially automatically) data from open access sources. The following are examples of sources, where CACIP is harvesting: <u>FAO GeoNetwork</u>, <u>NASA - MODIS satellite data</u>, <u>The World Bank Open Knowledge Repository of World Bank (OKR-WB)</u>, <u>Climate Technology Center & Network (CTCN)</u>, <u>Natural Resource Governance Institute - Resource Governance Index Source Library</u>. Each data/knowledge product will have metadata with references to its original source.

For more information on CACIP FAQ, please click



Project: Central Asia Regional Climate Information Platform.

The main objective is the development a Central Asia Regional Information Platform which will help stakeholders to access, analyse, and visualize public-domain data to support improved awareness, assessment, and decision support. This is expected to make available comprehensive and up-to-date relevant data and information, linking with high-quality datasets (including time series and spatial information) from global, regional, and local sources, provide analytical tools and interfaces for the visualization and interpretation of data and information (e.g. mapping tools to layer data and map hotspots and areas at risk, screening tools, etc.).

For more information, please visit:

https://mel.cgiar.org/projects/cacip www.CentralAsiaClimatePortal.org

AUTHOR:

Munisa Inagamova

CO-AUTHORS: Svetlana Saakova

SUGGESTED CITATION

Authors (28/09/2020). CACIP Platform – Issue 9. International Center for Agricultural Research in Dry Areas (ICARDA): Beirut, Lebanon.

DISCLAIMER



This document is licensed under the Creative Commons Attribution-ShareAlike 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by-sa/4.0/.

Unless otherwise noted, you are free to copy, duplicate, or reproduce and distribute, display, or transmit any part of this publication or portions thereof without permission and to make translations, adaptations, or other derivative works under the following conditions:

ATTRIBUTION. The work must be attributed, but not in any way that suggests endorsement by the publisher or the author(s)

SHARE ALIKE. If this work is altered, transformed, or built upon, the resulting work must be distributed only under the same or similar license to this one.

Photo Credit: ICARDA







