

Quick Start Guide: Cultivista

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Discovery Park

The Cultivista web tool presents monthly information on the area of sowing and water demand of the main crops of Arequipa, Peru. This data can be used to:

- Understand the demand for water, in each region and there is little, depending on the crops that are planted;
- Support agricultural planning; and
- Forecast agricultural production.

Getting Started: The Cultivista Homepage

Cultivista can be accessed at <https://swatshare.rcac.purdue.edu/cmtool/>. Currently, crop and water demand data is only available for the city of Arequipa. Plans are currently being developed to expand the tools for other districts! La primera s two screens allow you to select areas of interest.

Click here to see the data of the city of Arequipa and its surroundings

Data can be observed by month or over time

Activate here the district selection modes

Districts can be selected on the map

Here you can view the data in table format

Select districts and dates

Here is the classification accuracy

Cobertura	Área (ha)	Porcentaje de área (%)	Área (ha)
Alfalfa	361	4.4	368
Brócoli	281	3.4	374
Maíz	0	0	0
Ajo	171	2.1	3567
Vainita	0	0	0
Lechuga	27	0.3	346
Cebolla	1432	17.6	2127
Alverja	356	4.4	465
Quinua	65	0.8	85
Limpio	3660	44.9	0
Total	8149	100	7332

Result display options



In this example, you can see the growing area and water demand in pie chart format for the entire city of Arequipa, in September 2019

More information

This tool uses supervised classification methods, along with terrestrial reference data and high-resolution satellite imagery to classify the 9 main crops of the region. It also includes consistency fixes to ensure maps are spatially and temporally consistent. Currently, this tool provides monthly crop maps from September 2019 to February 2020, the maps include the city of Arequipa and the surrounding agriculture. It also provides information on the area occupied by each type of coverage and estimates of water demand. The development infrastructure is already in place to extend the tool to more months and larger regions.

For more information about this tool, you can access the following resources:

- The annual user manual of Cultivista
- The Cultivista video tutorial

All of these resources, our tools, and other information discussed by the SWM team can be accessed on our website at https://purdue.ag/nexus_tools.

In this example, you can see the growing area over time for the Sachaca district. The percentage of cultivation area and water demand can also be visualized.



CONTACT

For more information about the developers, this and other tools developed by the Sustainable Water Management team of the Nexus Institute of Arequipa, contact us at nexus-swm@purdue.edu.