

Vignobles du Sud-Ouest prepare to adapt

First results of the SO'ADAPT project

- Launched in 2022, the SO'ADAPT project, aimed at assessing the effects of climate change in the vineyards of the South-West and defining adaptation strategies, has delivered its first results.
- These were presented to representatives of the IVSO and the AOP and IGP of the Sud-Ouest at a steering committee meeting held on January 23.
- The first set of results relates to methodology, the project having identified 21 useful indicators for characterizing the impact of climate variations on vine development, based on past data.
- The second set of results is of a practical nature. The researchers in charge of the project were able to distinguish three groups of vineyards according to their level of vulnerability to climatic variations.
- The next step will be to use modeling tools to simulate the behavior of each group of vineyards between now and 2050.

The starting point for the SO'ADAPT project was the hydro-pedo-climatic characterization of the various vineyards in the South-West of France. This was achieved by cross-analyzing the evolution over twenty years of soil components, plant material and climatic indices recorded by 24 meteorological observation points covering 8 wine-growing sub-zones. 21 indicators were selected: 7 thermal indicators, 7 hydric indicators and 7 water balance indicators (carried out at 2 different soil depths and at 3 stages in the vine cycle: flowering, veraison and harvest).

The results revealed distinct levels of vulnerability, enabling the region to be segmented into three groups in terms of the vines' current water behavior: the most exposed (the vineyards of Fronton and Tarn-et-Garonne), the moderately exposed (the vineyards of Lot, Tarn and eastern Gers) and the least exposed (the vineyards of Aveyron and western Gers, including Saint-Mont and Madiran-Pacherenc). Researchers will now model the evolution of these three groups of vineyards up to 2050, using prospective climate data that will incorporate the various climate change scenarios.



The final phase of the project will qualify the vulnerability of each wine-growing area and identify local adaptation levers in order to define adaptation strategies as close to the ground as possible. These strategies may include measures concerning plant material, technical itineraries or production infrastructures. They will be based on an assessment of costs and profitability. In each winegrowing sub-zone, field demonstrations of interesting practices or strategies are also planned.

SO'ADAPT

Launched in June 2022 under the aegis of IVSO, SO'ADAPT is a collective project bringing together a number of partners: the Institut français de la vigne et du vin (IFV), in charge of steering, the Occitanie Regional Chamber of Agriculture and the Departmental Chambers of Agriculture of Aveyron, Haute-Garonne, Gers, Lot, Tarn and Tarn-et-Garonne. SO'ADAPT, with a budget of 310,719 euros, is financially supported by the Occitanie Region and the Adour-Garonne Water Agency. The project is scheduled for completion in May 2025.

SO'ADAPT ALSO HELPS TO DOCUMENT WATER ACCESS ISSUES.

Thus, the first phase of the project has already created "soil sheets" adapted to each winegrowing sub-zone, enabling winegrowers to easily estimate the potential of what is known as the useful soil water reservoir, i.e. the quantity of water a soil can store and return to plants. At the same time, maps of areas where irrigation volumes are under pressure, and of the level of security of access to water at key stages in the vine cycle, are being drawn up.

"A few years ago, the LACCAVE project, led by INRAE, highlighted the considerable impact of climate change on the vine cycle and, by extension, on wine profiles. In response, we decided to launch the SO'ADAPT project, with the following mission statement: to provide the current and future generations with the keys to adapting viticulture to new agro-climatic conditions, so as to preserve the qualitative and quantitative potential of South-Western vineyards. This project is obviously in line with the Interprofession des Vins du Sud-Ouest's climate strategy, the other part of which, presented a short while ago, concerns the

implementation of a decarbonization strategy for our vineyards and our businesses, so that we can play our part in the fight against climate change."

- Joël Boueilh and Christophe Bou, IVSO co-presidents

"The SO'ADAPT project is based on an ambitious and original method, aimed at defining the vulnerability, at the finest possible scale, of the different vineyards in the South-West of France by 2050. We plan to model a wide range of information, including changes in climatology, soil type, plant material and water availability, in order to prioritize tomorrow's vulnerabilities, vineyard by vineyard. Depending on the sector, this could involve, for example, the risk of frost, water stress or heat stress. On a territorial scale, the definition of vulnerabilities will enable us to activate the right adaptation levers, which could be technical or strategic: as we study both planted and unplanted areas within a production zone, it could be advisable to relocate a vineyard within a production zone to unplanted areas if these appear less vulnerable."

- Éric Serrano, Director of IFV's South-West division

