The closely interlinked databases, **SIGRIAN** and **DANIA**, can be defined as an overall knowledge system that is useful not only in the planning phase, but also in evaluating and monitoring agricultural and environmental policies for water resources.

SIGRIAN and DANIA are accessible online for consultation and updating by decision-makers and planners operating in the Italian irrigation sector, such as Ministries, Regions, Irrigation boards and their associations, and the River Basin District Authorities. The Regions and Irrigation boards are responsible for data implementation.

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CREA WATER RESOURCES POLICIES: THE CREA-PB DATABASES















The National Information System for Water Management in Agriculture (SIGRIAN) created and managed by the Council for Agricultural Research and Economics – Research Centre for Agricultural Policies and Bioeconomy (CREA-PB), is the reference database for the collection of data and information on irrigation water use at the national level, pursuant to the "National Guidelines for the quantification of irrigation volumes" (MD 31/07/2015), in accordance with the ex-ante conditionality for water resources that are applicable to EAFRD.

SIGRIAN was established in 1998 as a GEO database to provide an overview of the Italian irrigation system. The system collects management, infrastructural and agronomic information on irrigated areas. Therefore, SIGRIAN is the system to which all the Irrigation boards, coordinated by the Regions and Autonomous Provinces, must transmit measured and/or estimated water volumes at specific time intervals, linked to collective or self-supply irrigation, which have been abstracted purely for irrigation purposes or miscellaneous use, and used for irrigation purposes or returned to the natural hydrographic network. Besides providing information on water use in agriculture, this system contributes to the assessment of the efficiency level of national irrigation networks and potential investment priorities; in addition, SI-GRIAN plays a role in the definition of certification models on the sustainability of water use.





The National Database of Investments for Irrigation and the Environment (DANIA), created and managed by CREA – Research Centre for Agricultural Policies and Bioeconomy (CREA-PB), is an online database that collects the planned and financed investment projects implemented by the Irrigation boards for the sustainable use of water (solely for irrigation purposes, including multi-objective reservoirs) or with an environmental character to defend agricultural production potential from hydrogeological hazards.

DANIA is a support tool to be used in the programming and monitoring of policies, which allows an overall picture of the infrastructural needs of the irrigation sector to be constantly updated and shared between Ministries and the Regions/Autonomous Provinces that are responsible for organizing and financing, and the Irrigation boards that have planned the interventions and will implement them. The detailed information on each intervention makes it possible for them to be catalogued, and thus the user can search by making a selection based on technical, financial or environmental criteria. These parameters can be used both in the planning and monitoring phases of financed projects to evaluate the efficacy of the policies, through the quantification of appropriate indicators (e.g., water savings achieved). DANIA also makes it possible to record the extent to which the Irrigation boards have fulfilled the quantification obligation of the irrigation volumes in SIGRIAN, as a precondition for financing through public funds.