WATER MANAGEMENT SERVICES
REDUCE COST AND IMPROVE EFFICIENCY
Are there different water storage capacities in a single crop area? Is it possible to prevent puddles in, or erosion to, your soil by managing the irrigation time? Is it possible to optimize inputs such as water and fertilizers by uniform distribution in soil? These and other questions are frequently raised, based on the reality on the ground and the needs of our clients. For this reason, SGS offers five services that help to optimize water – a valuable, scarce and exploited resource. In addition, they help to improve crop yields through good irrigation.

**01 WATER IN SOIL STORAGE CAPACITY MAPPING**

Involves identification and soil sampling to prepare maps, and uses the data to establish both standard and differentiated irrigation management zones.

It is performed by:
- a. Field visit and sampling
- b. Laboratory analysis of samples
- c. Results interpretation and mapping
- d. Report delivery

This service enables you to:
- Improve crop yields through accurate irrigation in particular areas
- Establish the differentiated water dose for each soil type
- Increase accuracy in the use of water
- Plan a better irrigation system

**02 INFILTRATION SPEED**

Consists of determining the vertical speed entry of a thin sheet of water to the soil profile.

It is performed by:
- a. Field visit
- b. Tests and field trials
- c. Results interpretation and reporting
- d. Report delivery

This service enables you to:
- Improve the design of the irrigation system
- Avoid puddles and water erosion
- Identify the irrigation time
- Calculate the water storage capacity

**WHY CHOOSE SGS?**

We have our own methodology, supported by offices globally, to audit agricultural fields

We have staff trained to identify issues and troubleshoot irrigation projects

We offer the widest network of laboratories worldwide
INCREASE CROP PERFORMANCE MANAGEMENT SERVICES

**03 MOISTURE RETENTION CURVE**

Recognizes the amount of water your soil can store within its suction boundaries. The determination of the moisture retention curve is carried out in the laboratory with different retention values (between 0 to 15 atmospheres).

It is performed by:
- Field visit and sampling
- Laboratory analysis
- Results interpretation and reporting
- Report delivery

This service enables you to:
- Identify field capacity and wilting point
- Avoid moisture stress
- Obtain the irrigation criteria in order to determine the usable water or constant irrigation

**04 IRRIGATION SCHEDULE**

Devises an irrigation schedule for an agricultural field in quantity of water (m³/ha) and frequency (in hours or days).

This service is performed using the crop evapotranspiration data, information obtained from the water storage capacity map, infiltration speed, and the characteristic curves of moisture retention.

This service enables you to:
- Provide water to the crop in precise quantities and at specific times. Uniform management zones avoid excessive irrigation costs due to losses or various problems

**05 IRRIGATION SYSTEM AUDIT**

Involves inspecting agricultural fields to determine if your irrigation system is efficient.

It is performed by:
- Field visit: location definition, determination of fertilizers and sample collection
- Results interpretation and reporting
- Report delivery

This service enables you to:
- Understand the current status of an irrigation system
- Identify areas for improvement
- Determine if the concentration of fertilizer applied and the amount of water programmed is distributed homogeneously throughout the agricultural field
- Identify corrective measures to optimize resources

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Contact us

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