

INSURE YOUR SOIL MOISTURE

-A first in South Africa



Gideon Loubser, Agnovate

Agnovate Insurance (Agnovate) is an innovative underwriting agency in partnership with Guardrisk. Agnovate proudly offers a unique insurance product that enables clients in South Africa to insure against crop failure.

Who is Agnovate Insurance?

Based in Pretoria, Agnovate is an authorized financial services provider (FSP No 48802) that, in collaboration with Guardrisk, has been offering new-generation insurance products to the agricultural sector of South Africa since 2018. Agnovate strives to make extensive use of new technology in its risk modeling, monitoring, and loss assessment processes. Agnovate also leverages strategic partners to provide specialized services and systems that help Agnovate achieve its vision and mission as a technology insurer and market disruptor. Agnovate's new-generation index-based insurance products aim to hedge against climate volatility which typically leads to systemic damage such as drought stress, pollination problems, and drowning conditions.

Why is soil moisture insurance (SMI) relevant?

There are two critical risk periods during the production cycle of most grain crops, namely the planting period and the flowering and filling period. In the case of inadequate soil moisture during the planting period, forced replanting often leads to a failed harvest. Agnovate's SMI enables the insured client and its stakeholders to cease planting, while the policy reimburses input costs already incurred and provides cash flow to bridge the season. Secondly, available soil moisture is highly correlated with grain yield. The availability of soil moisture is particularly critical during the flowering and filling period. Available soil moisture is often adversely affected by the well-known mid-summer drought that typically occurs from early January to late March in the summer crop production regions of South Africa. With Agnovate's SMI, an insured client can take out coverage against a soil moisture deficit during a risk period of their choosing based on historical trends in their region.

How does soil moisture insurance work?

Agnovate uses soil moisture data provided by the Copernicus program of the European Space Agency. Soil moisture data is provided per grid block of 0.1 degrees lat/long (approximately 10km X 11km) for various soil depths, such as 20cm, 40cm, and 60cm, at a frequency of every 10 days. Each grid block is known as a risk area. Agnovate analyzes and processes the long-term historical soil moisture data of each grid block to determine the historical norm of soil moisture in the grid block. Thus, the volatility of soil moisture in the grid block and the resulting risk profile are calculated. Coverage kicks in once the deviation in soil moisture during a chosen risk period is greater than the standard deviation as determined by the policy's parameters. Agnovate continuously monitors the soil moisture status and provides a report every 10 days for each grid block. Thus, the insured is continuously updated on the soil moisture status in their risk area during their risk period.

A unique quotation application is available on Agnovate's website (www.agnovateinsurance.co.za). This application allows an insured client to generate their own indicative quotation. Various coverage options exist that enable the insured client to customize their policy to their affordability and unique financial profile.



JG Shields, Managing Director of Agnovate

Although there is a strong correlation between soil moisture and grain yield, it is important to understand that Agnovate's SMI only covers a deviation in soil moisture and not the insured client's yield. Please contact us for more information.

"Changing the mould of traditional agri-insurance"