

MINISTRY OF KNOWLEDGE ECONOMY, STARTUPS AND MICRO-ENTERPRISES



DEVELOPMENT OF AGROBUSINESS INNOVATION IN ALGERIA « InnovAgro »

THE AGRITECH BUSINESS OPPORTUNITIES IN ALGERIA

SmartPolyWater

Innovative polymers to optimise water retention and management in agriculture.



TYPE OF OPPORTUNITY:

Advanced materials and Internet of Things (IoT) technology.

*Related to other sheets

CHALLENGE:

In a context of increasing water stress, agricultural soils do not retain enough water, leading to over-consumption and major losses. This problem has a direct impact on crop productivity, particularly in arid regions.

IMPACT ON THE VALUE CHAIN:

Upstream : Reducing dependence on irrigation and the costs associated with excessive water use.

Downstream : Improving crop yields and the sustainability of farming systems through better management of water resources.

SOLUTION:

Development of superabsorbent polymers that gradually release water as plants need it, integrated with an IoT system to monitor soil moisture in real time and accompanied by training modules to raise farmers' awareness of their use and environmental impact.



BENEFITS OR EXPECTED IMPACT

- Water savings: Significant reduction in water use on farms.
- Improved yields: Crops are better hydrated, even in periods of drought.
- Sustainability: responsible use of water resources and adaptation to changing climatic conditions.
- Ease of integration: Compatibility with existing farming practices

SOLUTION COMPONENTS

- Superabsorbent polymers: Designed to absorb several times their weight in water.
- IoT sensors: To monitor and optimise the use of polymers according to soil conditions.
- Training and Support: To help farmers integrate these solutions effectively into their practices.

WHO WILL PAY FOR THIS SERVICE OR PRODUCT?



EF Polymer

offers environmentally friendly, biodegradable polymers designed to optimise water retention in agricultural soils. These polymers absorb and retain water, releasing it gradually as crops need it, reducing water wastage and improving yields.



Tramfloc

offers a range of water retention polymers designed to improve soil moisture and optimise water use in agriculture. These polymers conserve water in soils, reducing irrigation requirements and increasing yields, while promoting sustainable management of water resources.

CLICK HERE 🗸

SNF

offers superabsorbent polymer solutions, such as Aquasorb, specially designed for agriculture. These polymers improve soil water retention, optimise irrigation practices and increase crop yields, while reducing water consumption.

CLICK HERE 🖌

TerraCottem

offers innovative soil amendment solutions incorporating absorbent polymers, nutrients and growth stimulants. These products improve water retention and soil quality, reducing irrigation requirements while increasing crop yields.

CLICK HERE 💊



PROCESS FOR REALISING THE OPPORTUNITY

PHASE 1:

Research and Development : Testing different polymers adapted to local soils.

PHASE 2:

Pilot deployment : Introduction of polymers and IoT sensors to a small group of farmers.

PHASE 3:

Training : Sessions to train farmers in the use of polymers and sensors.

PHASE 4:

Evaluation and scalability : monitoring results and scaling up.





Here are some opportunities that you might be interested in related to yours – Scan QR code



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