

# DEVELOPMENT OF AGROBUSINESS INNOVATION IN ALGERIA « InnovAgro »

## THE AGRITECH BUSINESS OPPORTUNITIES IN ALGERIA

### Waste2Wealth

Intelligent transformation of agricultural waste.

IDEA  
N°28



TYPE OF OPPORTUNITY: **Internet of Things (IoT) technology and automation for waste management and processing.**

\*Related to other sheets

#### CHALLENGE:

A large quantity of agricultural waste is not exploited and often ends up being burnt or dumped, resulting in negative environmental impacts and significant economic losses. In addition, the lack of technological tools makes their recovery complex and inefficient.

#### IMPACT ON THE VALUE CHAIN:

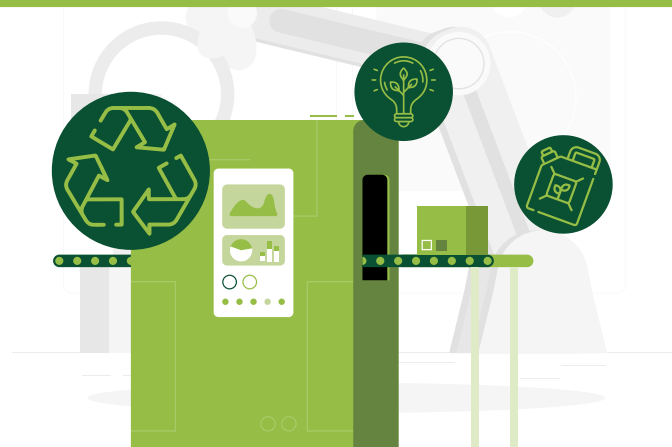
**Upstream :** Reducing losses by converting agricultural waste into useful products.

**Downstream :** Development of new economic opportunities for farmers and processors, while reducing the ecological footprint.

#### SOLUTION:

Creation of an intelligent processing unit capable of treating and recovering various types of agricultural waste (e.g. stalks, hulls, food residues).

This unit is equipped with IoT sensors to monitor processes in real time, automation tools to optimise operations and advanced processing systems to produce reusable or bioenergy materials.



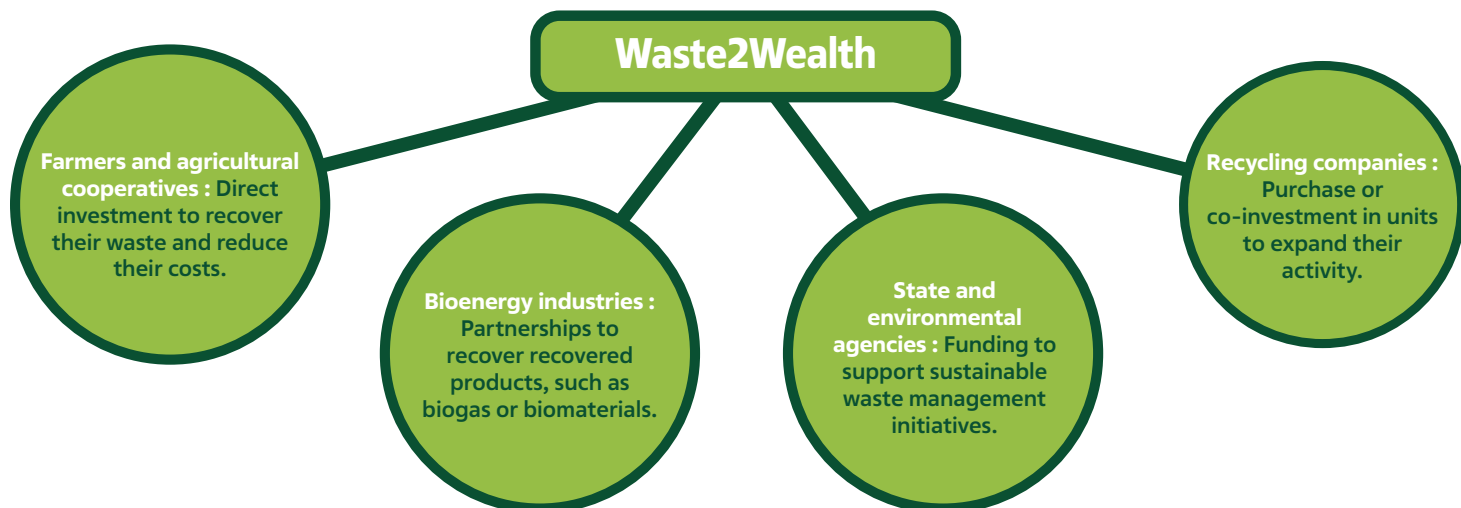
#### BENEFITS OR EXPECTED IMPACT

- **Waste reduction:** Transformation of agricultural residues into useful products such as biogas, fertilisers or building materials.
- **Environmental sustainability:** Reducing carbon emissions and limiting pollution from agricultural waste.
- **Economic opportunities:** Creation of new sources of income for farmers and cooperatives.
- **Optimisation:** Efficient transformation processes monitored in real time using IoT sensors.

#### SOLUTION COMPONENTS

- **IoT sensors:** Real-time monitoring of key parameters (temperature, humidity, gas levels) during processing.
- **Intelligent automation:** Optimising transformation processes to maximise efficiency and reduce costs.
- **Modular processing:** Ability to manage different types of waste to produce a variety of outputs (biogas, compost, materials).
- **User interface:** Mobile application for controlling the unit, monitoring performance and receiving notifications.
- **Training:** Raising awareness and training users in best practice for waste management and use of the unit.

# WHO WILL PAY FOR THIS SERVICE OR PRODUCT ?



## SUCCESS STORIES

### BioCycle

develops solutions for transforming organic waste into compost and biofuels using mobile units equipped with intelligent sensors to maximise operational efficiency.

[CLICK HERE](#)

### BiobiN

offers on-site systems to effectively manage organic waste, helping it to be transformed into high-quality compost. These modular solutions enable sustainable and cost-effective management.

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## PROCESS FOR REALISING THE OPPORTUNITY

### PHASE 1:

**Feasibility study :** Analysis of the types of agricultural waste available and local needs.

### PHASE 2:

**Technological development :** Design of intelligent units with integration of IoT sensors and automation tools.

### PHASE 3:

**Pilot installation :** Deployment of the unit on farms to test its effectiveness.

### PHASE 4:

**Extension :** Expansion of the project with units adapted to different regional contexts.

### PHASE 5:

**Monitoring and adjustment :** Ongoing user training and optimisation based on feedback

### COMPLEXITY



### LEVEL OF INVESTMENT NEEDED



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

Linked in chain

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