

DEVELOPMENT OF AGROBUSINESS INNOVATION IN ALGERIA « InnovAgro »

THE AGRITECH BUSINESS OPPORTUNITIES IN ALGERIA

AgroBrick

Ecological bricks reinforced with agricultural waste.

IDEA
N°31



TYPE OF OPPORTUNITY:

Eco-construction and circular economy.

*Related to other sheets

CHALLENGE:

The construction industry is one of the most polluting, generating large quantities of CO₂. At the same time, agricultural waste such as palm stalks, husks and other organic residues are under-utilised and often burnt, also contributing to air pollution. What's missing is a solution for recovering this waste while meeting the need for sustainable building materials.

IMPACT ON THE VALUE CHAIN:

Upstream : Reducing agricultural waste by giving it a second life in the construction value chain.

Downstream : Reducing the carbon footprint of construction by using alternative, sustainable and local materials.

SOLUTION:

Development of environmentally friendly bricks made from agricultural waste such as palm stalks, nut shells and cereal straws. These materials are :

- **Sustainable:** Reducing the use of natural resources such as clay and cement.
- **Insulation:** Improved thermal and acoustic properties thanks to its organic composition.
- **Customisable:** Adaptable to the types of agricultural residues available in different regions.
- **Technological:** Integration of IoT tracking to monitor production conditions and guarantee brick quality.

BENEFITS OR EXPECTED IMPACT

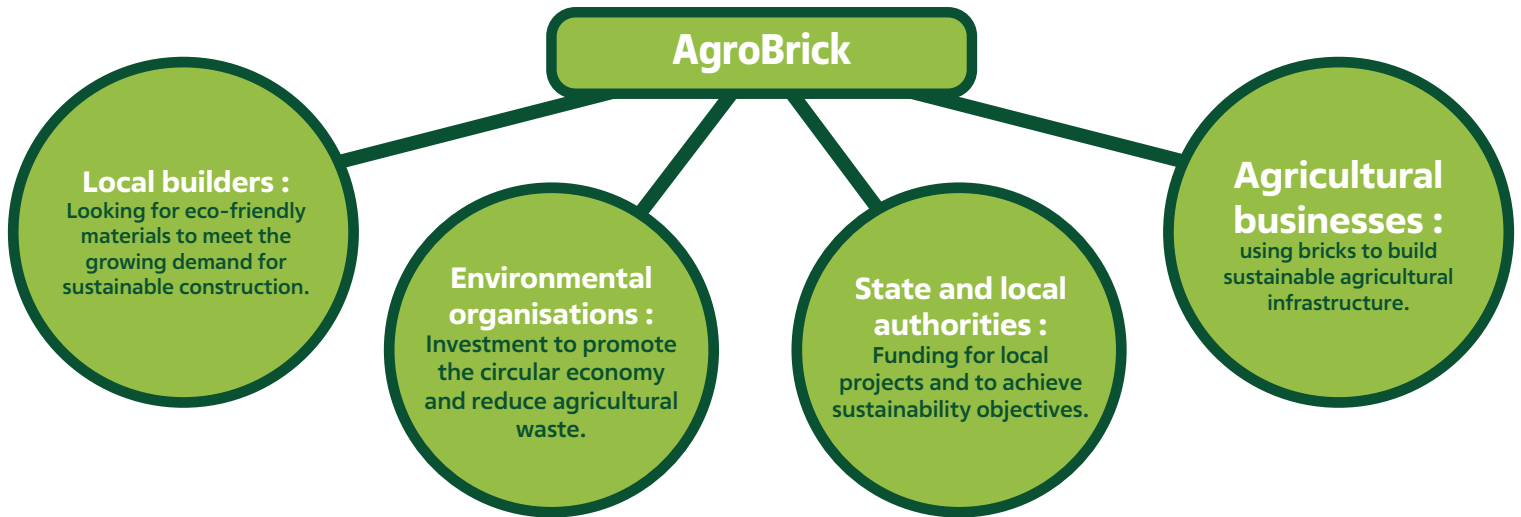
- **Circular economy:** Recycling agricultural waste into useful building materials.
- **Reduced costs:** Use of local and abundant materials, reducing production and transport costs.
- **Sustainability:** Reducing CO₂ emissions in the construction industry.
- **Local resilience:** Encouraging rural economies by transforming waste into high value-added products



SOLUTION COMPONENTS

- **Collecting agricultural waste:** Working with farmers to collect and sort residues.
- **Production units:** Small modular plants for transforming waste into bricks or other building materials.
- **IoT technology:** Monitoring production processes to guarantee quality and optimise resources.
- **Ecological certifications:** Obtaining labels to enhance the credibility and marketability of materials.
- **Technical support:** Training local craftsmen in the use and installation of ecological bricks.

WHO WILL PAY FOR THIS SERVICE OR PRODUCT ?



SUCCESS STORIES

AgriPlast

Using agricultural residues to manufacture building materials.

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CarbonBuilt

Low-carbon bricks made from industrial waste.

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Biobricks

Biodegradable bricks made from organic waste.

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MycoWorks

Manufacture of building materials from mycelium and agricultural waste. An innovative approach to environmentally friendly products.

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JustBioFiber

Develops eco-friendly bricks made from hemp, offering exceptional insulating properties and durability.

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PROCESS FOR REALISING THE OPPORTUNITY

PHASE 1:

Research and development: Identifying suitable agricultural waste and testing different compositions for bricks.

PHASE 2:

Pilot plant: Set up a production unit in a pilot region to validate the model.

PHASE 3:

Training: Training local producers and craftsmen in the use of equipment and materials.

PHASE 4:

Marketing: Launch the bricks on the local and regional market, emphasising their sustainability and economic benefits.

PHASE 5:

Evaluation: Monitoring environmental and economic impacts to adjust and improve the solution

COMPLEXITY



LEVEL OF INVESTMENT NEEDED



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

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complementary goals
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