BBVA Open Innovation

Sow the seeds of innovation and you will reap productivity: the agrotech revolution

Agriculture is the largest global employer of people, **providing a livelihood for 40% of the world's population.** But it faces increasing challenges, from high water consumption to the need to deliver products to an expanding population in a more efficient way. **Innovation** plays a key role in overcoming these challenges, and **agrotech startups** are already reaping the rewards.

A SECTOR FULL OF OBSTACLES

Traditional agriculture, a poorly digitised sector, at the same time faces the **scarcity of natural resources...**

73% Global deforestation as a result of agriculture

40% Wasted irrigation water

... And a growing demand for food

People suffering from hunger

828 MILLION 2022

2 BILLION 2050

With a growing population, a race against time against climate change, lack of resources and crises such as the war in Ukraine threatening supplies, **the agricultural sector has to accelerate change.**

A GLIMMER OF LIGHT: AGROTECH

Technology applied to agriculture is one of 2022's innovation trends for **BBVA Open Innovation.**

The sector's start-ups offer innovative technological solutions to add value, contribute to digitisation and improve the performance of agri-food industries throughout the entire chain.

Production · **Transformation** · **Distribution** · **Commercialisation**

There are also start-ups specifically focused on combating **food waste.**

ALL THIS IS THE COUNTRYSIDE: AGROTECH AT A GLANCE

Country rankings by number of agrotech companies

10,500+ agrotech start-ups in the world

1	USA	2,896
2	INDIA	1,338
3	SPAIN	757
4	UNITED KINGDOM	595
5	CANADA	542
6	AUSTRALIA	474
7	CHINA	294
8	THE NETHERLANDS	273
9	FRANCE	254
10	GERMANY	242
11	BRAZIL	219

Top-ranked in Latin America.

THE TRENDS AND START-UPS THAT ARE THRIVING

Cutting-edge technologies

The application of the latest technologies makes it possible to optimise farm management.

Big data

Analysis of large amounts of data to draw conclusions and increase efficiency.

KILIMO · ARGENTINA

A platform which uses satellite, weather and field data to optimise irrigation.

AI

Optimised crop and livestock management.

BrioAgro · BRAZIL

Algorithm for intelligent watering, which can be automated remotely.

Participants in BBVA's **Fast Track** initiative.

IoT

Connected devices and networks for remote monitoring and management.

ixorigue · SPAIN

GPS collars for digital livestock tracking and monitoring.

Participants in BBVA's **Fast Track** initiative.

Blockchain

Technology for the secure storage and transfer of data.

ucrop.it · ARGENTINA

A cooperative farming system that uses blockchain for confidential traceability of information.

Key applications

Agrotech start-ups innovate to provide solutions for different purposes...

Saving water

Software to reduce consumption of this precious resource.

GROOTS · SPAIN

Vertical gardens which increase production and avoid wasting water.

Optimización de la planificación empresarial

Sistemas ERP en la nube.

trinity · CHILE

Virtual assistant to manage data, calculate natural capital and certify carbon footprint.

Participants in BBVA's **Fast Track** initiative.

New sales channels

Access to finance, sales channels and market data analysis.

PRODUCEPAY · UNITED STATES

Access to finance, sales channels and market data analysis.

Increased pest resistance

Bacteriophage viruses that help fight bacteria affecting plants and animals.

PHAGELab · CHILE

Bacteriophage viruses that help fight bacteria affecting plants and animals.

Improved plant health

Development of bio-fertilisers; beneficial micro-organisms

BIOSTOC · CHILE

Fertilisation and crop protection solutions derived from earthworm humus.

PARTNERS TO WATER THE NEW PROJECTS

Agrotech startups attract increasing investment worldwide

2020: **$3.3 BILLION** 422 operations

2021: **$5 BILLION** 440 operations

In **Latin America**, investment in lagging behind.

$35.4 MILLION in 2021

3% of total **investment rounds.**

Public and private bodies provide capital and help to boost the sector

Investment funds
AgFunder, AgVentures II, S2G Ventures

Associations
Food CLICs, AgroTech España, World Agro Tech

BBVA does its bit

Microfinances to adapt to climate change

Agro-loans for Ecological Conversion

NURTURING SUSTAINABILITY

For agriculture, a sector that is as fundamental to our survival as it is damaged by our way of life, **agrotech innovation is a revolution.**

ENVIRONMENTAL reduces pollutant emissions and water waste.

SOCIAL creating new jobs and improving conditions for existing workers.

ECONOTMIC increase productivity and reduces costs.

An increasingly green and efficient agriculture is an imperative to ensure **food security and environmental conservation,** for us and for future generations.

Sources: UN, IMF, FAO, AgroTech España, Pitchbook, BBVA, Spain Startup, World Bank, LAVCA, JP Morgan, LAEB, World Food Programme, Crunchbase, AgFunder, Bloomberg