JAHANI & ASSOCIATES

J&A Cross-Border
Private Capital Markets Report
Latin American
Agtech Deals
from 2010
to 2020

The agriculture technology (agtech) industry comprises all companies that apply technology to farming activities. Technology-assisted farming, complex water management solutions to modern genomics, has been around since the early ages of civilization. Advancements in agtech drove the food industry, and the management systems developed for farms and crops can be applied to other industries such as resource management and big data. The agtech industry can be segmented inputs, production, selection, processing, distribution, and marketing. The inputs segment accounted for over 80 percent of the capital invested in Latin American companies.

With agriculture pivoting toward relying more on technological advancements and their applications, venture capitalists and investors increased crossborder operations with Latin American companies in agtech.

This report outlines the announced investments made in Latin American agtech companies between 2010 and 2020. The focus is placed on deal count, volume, and industry while spotlights are on the most active investors, such as SP Ventures, NXTP Ventures, and The Yield Lab, and the deals closed by Produguimica Industria e Comercio.

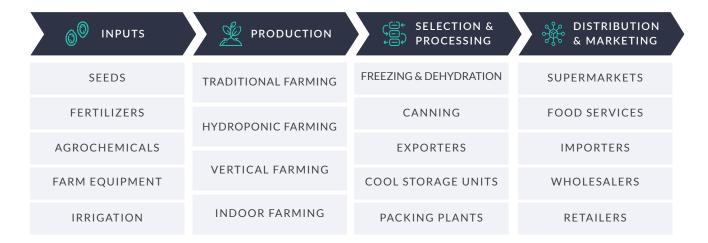
AUTHOR



GARETH WALDECK

Gareth Waldeck is a member of the investment banking and global trade team at J&A. He is based in Abu Dhabi. He is originally from South Africa and studied in Economics at Fordham University. He has served as panelist for multiple forums such as the Diversity Dividend: Why Equality Benefits Us All and regularly publishes in the space of cross border capital markets.

Segments Overview A CLOSER LOOK INTO THE AGTECH VALUE CHAIN



INPUTS

Inputs is the sector's largest and broadest segment. Companies that deal in agtech inputs work with seeds, agrochemicals, and equipment for farming and irrigation.

Working with seeds include genomics and biotechnology. Agrochemicals deal with pesticides, fertilizers, and foliar feeding.

PRODUCTION

Production and cultivation are arguably the most crowded agtech segments, yet they receive a small share of the total investment. Cultivation companies that include data analysis systems or incorporate machinery into the process have a better chance of

receiving investment, since traditional farming has not seen a notable growth rate over the last decade. Vertical farming, indoor farming, and hydroponics follow a rising trend in agricultural regions, such as Latin America, rural China, and Egypt.

SELECTION AND PROCESSING

If the raw material management allows for it, the selection and processing segment is usually integrated within the same firm in the value chain This segment includes the storage, manufacturing, or exportation of secondary or end products ready for the consumer. Exportation is the end goal for most producers

and processing plants within Latin America. Capital invested into such companies is used for operational expenses. There are many advancements in raw food ingredients processing, yet minimum research and development expenditure occurs in Central and South American agriculture companies.

DISTRIBUTION AND MARKETING

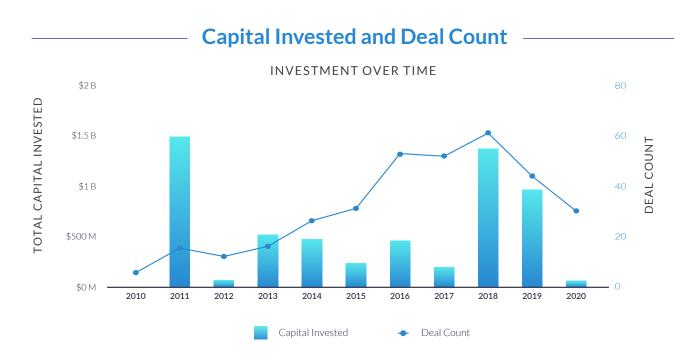
Logistics companies in the food and beverage business require cold storage units for most agricultural products. Latin American logistics companies deal with rot, odors, and pests.

Distribution companies with an international presence partner with agrochemical companies for food preservation and transportation. Capital

sources invested in 150 B2B firms as opposed to less than 50 percent B2C companies.

Marketing companies brand products for different sources. Most Latin American marketing firms promote local produce, while the international community advertises foreign, imported ingredients.

Latin American Market Overview AGTECH DEALS FROM 2010 TO 2020

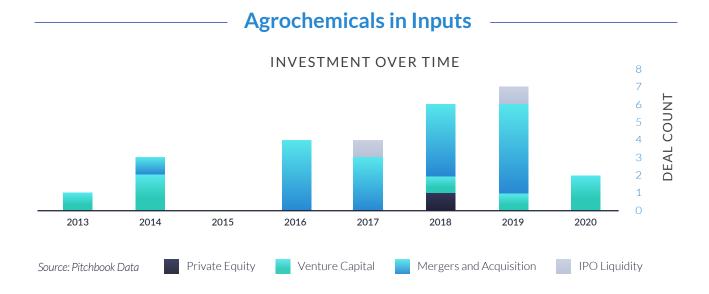


- Vale (metals and mining) acquired Vale
 Fertilizantes for \$1.2 billion, making 2011 the
 year with the largest amount of capital raised for
 agtech companies in Latin America.
- Drought issues prevented the closure of agriculture deals between 2010 and 2012, and
- besides Vale, few other firms were active in financing. The growing trend continued between 2013 and 2018 and is expected to resume in 2021.
- 2018 was the most active year in the period with over \$1.4 billion was deployed across 57 deals.

Value Chain Spotlight: AGROCHEMICALS IN INPUTS

Foreign capital sources actively invest in chemical production companies and research and development activities in Latin America. These investments made agrochemicals the largest segment for Latin American agtech companies

in the last decade. Companies researching or implementing agrochemicals in the Latin American region do so with fertilizers, such as early-crop supplements, pesticides, and foliar feeding.



- A total of 29 agrochemical companies in Latin America were actively involved in a private placement between 2010 and 2020.
- In 2015, several companies from Argentina,
 Brazil, and nearby countries were sanctioned
 for their use of chemicals in their crops. Several
 cancer cases in these countries were attributed
 to chemical exposure. This led to a notable drop
 in the companies actively looking for capital to
 acquire or produce similar chemicals.
- Companies that could not withstand this period were forced to declare bankruptcy or sell their assets. This increased the M&A activity over the next four years, with similar companies acquiring companies like Produquimica Industria e Comercio and Rizoflora

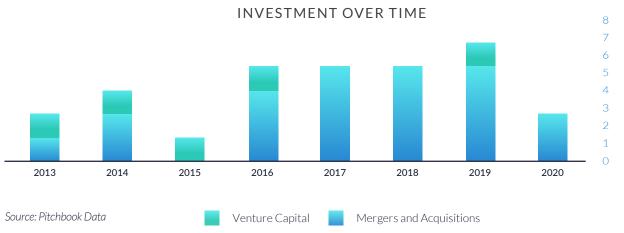
- Biotechnology due to their strategic value. During this period, eight Brazilian companies and two Argentinean agrochemical companies were bought.
- Venture capitalists and private equity firms invested \$5 billion in agricultural chemical deals in Latin America, or over 85 percent of the total capital deployed for agtech deals in the region.
- Deals with agrochemical companies in Latin America accounted for 64 percent of the total capital raised. In spite of the 2015 decrease in the number of deals, agrochemicals had more deals than all other verticals combined. Only 38 deals were completed for agrochemical firms, or 11 percent of the total deal count.

Value Chain Spotlight:

Agtech cultivation is a rather broad segment that encompasses early- to late-stage crop management, data analytics, chemical implementation, genomics, and care services. Cultivation is the foundational sector in Latin American agtech, yet it is second to agrochemicals. This is due to the number of companies in the region that do not have enough

R&D expenditures to attract external private placements. Cultivation companies in the region tend to grow vertically toward logistics and distribution as opposed to technology and data. As a direct result, cultivation receives a consistent amount of capital and predictable trends in deal count for the Latin American region.

Cultivation Capital Market Deal Count — INVESTMENT OVER TIME



- Cultivation deals raised 19 percent of the total capital for Latin American companies between 2010 and 2020. Thirty-nine cultivation companies in this region participated in 55 deals. This showcases the importance of cultivation in Latin American countries, as more than half of them were active in more than one round of investments.
- Most investment activities halted in 2015 due to the rising health concerns of chemicals and pesticides used on crops. Companies that dealt with cultivation followed the same trend.
- Agro Amazônia Produtos Agropecuários, a Brazilian company, was forced to sell to Sumitomo Corporation in 2015 with a 0.35 revenue multiple. Another company was marketed in 2016. After 2015, venture capital investment trends normalized until the 2020 COVID-19 pandemic, which introduced a 50 percent decrease in investment activities.



Agtech Deal Investment Forecasts Moving Forward

Latin American agtech startups set a new record for the decade in the first quarter of 2020.

Since the entire sector benefited from the concerns around food security due to the COVID-19 pandemic, new records are expected for this new decade.

Jahani and Associates expects financial activities to grow gradually through 2021 and reach record

numbers by the first quarters of 2022. Chemicals and early crop care are developing industries in Latin America. Trends show that manufacturing and chemical research and development will have the highest deal counts in the next coming years.

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