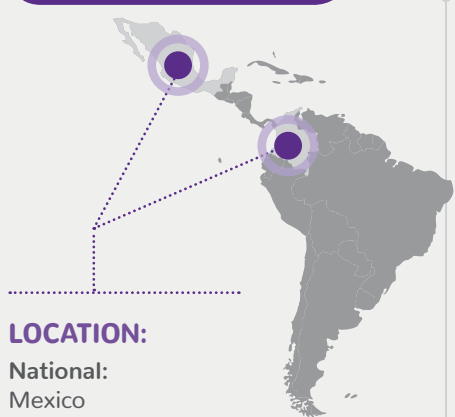




CO_ supports the socio-environmental entrepreneurship ecosystem in Mexico

Through its two intervention branches: CO_Plataforma and CO_Capital, CO has supported more than 600 enterprises at different stages of their development. One of them—Sistema.bio—provides small producers with access to clean energies and organic fertilizer to fight poverty and climate change and to promote food security.

CO_ supports the socio-environmental entrepreneurship ecosystem in Mexico



LOCATION:

National:
Mexico
Especially the State of Mexico, Morelos, Hidalgo, and Puebla.

International:
Colombia, Kenya, and India.



MAIN PARTNERS:

- Kaya Impact
- Village Capital
- Kiva



TYPE OF INVESTOR/SILO:
Investor



MOTIVATION/PROBLEM TO TACKLE:

Promote access to clean energy by means of technological solutions, capacity building, and financing for small farmers in order to improve their productivity, efficiency, and sustainability.



FINAL BENEFICIARIES:
Small agricultural producers.



SECTOR:
Agriculture and Livestock



TYPE OF FINANCING:
Equity

RESOURCES INVESTED OR DONATED
USD 500,000



NON-FINANCIAL SUPPORT OFFERED:

- Financial Management
- Operational (marketing, logistics, IT, sales, purchases, legal).



SDGS ADDRESSED



DURATION:
2015
-now

IMPACT:

71,826
people are using **clean and renewable** energy.



162,814
tons of CO2 **have been mitigated.**



More than
10 million
tons of waste have been treated.



More than
2,4 million
trees preserved per year.





BACKGROUND AND CONTEXT

Because of their limited access to information and new technologies, small farmers risk being left behind due to structural transformations occurring in the rural world, driven by advances in technology, energy, and innovation. Developing their productive potential and entering new markets allows them to increase their income and achieve better living conditions in their homes.

Furthermore, the world population is expected to grow from 7.3 billion people in 2015 to almost 9.8 billion by 2050.¹ In Mexico, the population will grow from 121 million in 2015 to almost 148 million by 2050.² In this scenario, a 50% increase in the production of food and agricultural products will be essential to meet the new demand,³ a challenge for small farmers, who will have to adapt and become more productive in a climate change context.

The use of clean energy is an opportunity for the countryside and small producers, due to the advantages it offers in terms of waste management and reduction of power consumption expenses. However, this practice is still not very widespread, partly due to lack of will and funding from governments.

The Energy Transition Law, passed in 2016, sets forth concrete goals to develop a low-carbon economy. It is stipulated that, by 2050, 50% of the total power generation will have to be "green."⁴ But it will be difficult to meet these commitments, since the current government has opted to invest in the extraction of hydrocarbons.

1 FAO, (2017). El estado mundial de la agricultura y la alimentación. Organización de las Naciones Unidas para la Alimentación y la Agricultura. Roma, 2017. Downloaded from: <http://www.fao.org/3/a-l7658s.pdf>

2 CONAPO, (2018). Indicadores demográficos de la República Mexicana, en el año. Accessed at: http://www.conapo.gob.mx/work/models/CONAPO/Mapa_Ind_Dem18/index_2.html

3 FAO, (2017). Op cit.

4 Secretaría de Energía Gobierno de México, (2016). México cumplirá con su meta del 35% de generación eléctrica con energías limpias en 2024. Boletín de prensa. Accessed at: <https://www.gob.mx/sener/prensa/mexico-cumplira-con-su-meta-del-35-de-generacion-electrica-con-energias-limpias-en-2024-consejo-consultivo-para-la-transicion-energetica>

Faced with these socio-environmental problems, and in order to support social entrepreneurs with the potential to solve large-scale challenges, CO_ decided—through its investment fund CO_Capital—to finance Sistema.bio, a social enterprise that designs, manufactures, sells, and finances biodigesters. These systems process organic waste and transforms it into biogas and organic fertilizer, allowing small producers to meet their energy needs.

The network of organizations put together by CO_Plataforma has allowed Sistema.bio to link up with relevant actors to become stronger.



DESCRIPTION

In 2012, Tania Rodríguez Riestra and Felipe Fernández set out to create a platform that would drive innovative and scalable solutions to help solve Mexico's most pressing challenges. The result was CO_Plataforma, designed as a second-tier organization (incubator of incubators) that provides funding and non-financial services to initiatives such as accelerators, incubators, and international certifiers to offer high-quality programs to social enterprises in Mexico.

For the past nine years, CO_Plataforma has selected and supported the launch of fourteen social business initiatives in Mexico. Through them, 100–250 companies focusing on issues related to lack of access to education, health care, employment, and basic infrastructure for people in poverty and marginalization in this country are supported every year.⁵

Given the maturity of the impact ecosystem in Mexico, the number of companies participating in the CO_ network programs, and the need to finance them, CO_Capital was created in 2017. This is a triple-impact investment fund (environmental, financial, and social) aimed at companies at an early growth stage that focus on reducing socio-economic inequalities and mitigating climate change, and which have a high scaling potential in Mexico and Latin America.

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⁵ Co, (2020). Miembros de nuestra plataforma. Accessed at: <http://co.org.mx/plataforma/miembros-de-nuestra-plataforma/>

The fund invests in enterprises that offer solutions in education, employability, economic development, infrastructure, water, energy, health and welfare, housing, and agriculture and food. Investments in this last sector seek to benefit small producers through innovative business models.⁶ As such, CO_Capital decided to support Sistema.bio.

Sistema.bio designs, manufactures, sells, and finances biodigesters. One of the efforts of the model is to improve the economic situation of small producers. Besides being able to use the energy produced for their agricultural activities and producing their own biofertilizers, producers can acquire equipment so that biogas can be used for their household needs.

The Sistema.bio intervention scheme ensures that each beneficiary receives information, training, and quality services for the operation and maintenance of their biodigesters. Producers receive tailored support for six months, to guarantee that the equipment is fully functional.

This support consists of six steps:

Sistema.bio offers affordable financial options to purchase biodigesters, since small producers usually do not receive loans from credit institutions, and do not have the capacity to pay up front.

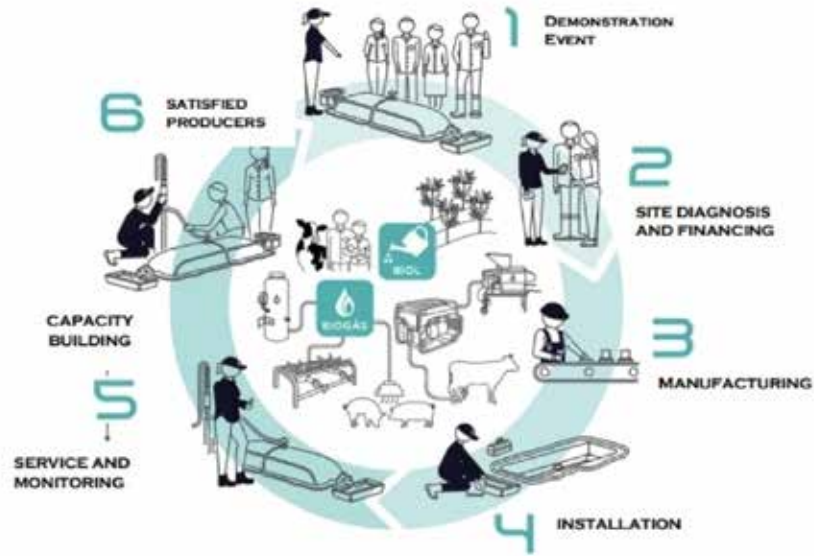
Due to the innovative and replicable nature of its model, Sistema.bio began to expand in 2016 with its arrival in Nicaragua. In 2017, it arrived in Colombia and Kenya and, in 2018, in India.

⌵

To have access
to CO_Capital
funds, the
company must
have a proven,
self-sustaining
business model.

⁶ Co, (2020). Sectores de enfoque. Accessed at: <http://co.org.mx/es/?p=enfoque>

Graph 1. Six-Step Intervention Model



Source: Sistema.bio, 2020



IMPLEMENTATION

To have access to CO_Capital funds, the company must have a proven, self-sustaining business model, as well as a solid team aligned with the mission and impact.

The approval of CO_Capital funding is characterized by a due diligence process that includes an analysis of the business model and the impact model. Only if the organization demonstrates a real impact they continue to the financial review process. During the investment process, the CO_Capital team works with impact advisors specialized in the sector to design the Theory of Change and the baseline metrics. These advisors support the team as they dialogue with the CO_Capital Investment Committee, where business, financial, legal, and impact issues are addressed.

The results of the process are submitted to the Impact Committee, the Investment Committee, and the Technical Committee, who vote in order to decide whether to invest in the enterprise or not.

Sistema.bio, has worked since 2017 with Kaya Impacto, which is part of the organizations incubated by CO_Plataforma and provides financial consulting for entrepreneurs to raise capital successfully. This led CO_Capital to invest in the company in 2019, demonstrating the importance of using first philanthropic capital to provide support services for early-stage startups, and later, through CO_, financing for growth companies.

 **Tailored Finance**

CO_Capital provided USD 500,000 in equity funding to Sistema.bio in a single disbursement, which accounted for 10% of the total capital raised in the round. Negotiations began in 2018 and concluded in 2019 with the disbursement of the investment. The investment was used for working capital, investment in technology, and providing microcredits for its clients.

Sistema.bio is characterized by a hybrid financing model, through which they receive philanthropic investments and capital with return.⁷

“We have been able to leverage a combination of resources, halfway between philanthropy, equity, and debt” Alex Eaton, CEO and co-founder, Sistema.bio.

 **Non-financial support**

The non-financial support with which CO_ has provided Sistema.bio through its philanthropic branch has greatly strengthened the project, through advice from organizations belonging to CO_Plataforma.

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⁷ In addition to Co_Capital, Sistema.bio has other investors such as DILA Capital, a venture capital firm; Electrifi, an impact investor that finances energy projects; and EcoEnterprise Fund, a world-renowned environmental impact investor.

It particularly engaged in an acceleration process with Village Capital and received fundraising advice from Kaya Impacto for over two years.

CO_Capital also provided direct support to Sistema.bio for its financial and operational management areas to strengthen its processes and the presentation of its financial statements. The support focuses on making Sistema.bio not highly “capital intensive”, i.e., so that it does not require constant financing from its investors to perform its biodigester sales, distribution, and maintenance activities.

Finally, the knowledge CO_ has in terms of the entrepreneurship and social investment ecosystem has allowed Sistema.bio to better understand the Mexican financial market.



RESULTS

CO_Capital has its own process to analyze and manage the impact of its investments. It starts with due diligence, with the development of a Theory of Change and monitoring metrics included in the investment contract. Within this framework, the enterprise has to submit monthly or quarterly reports of its financial, commercial, and impact information.

Apart from CO_Capital’s measurement and monitoring system, Sistema.bio has its own monitoring tools to report progress to its circle of investors. Its reports include commercial, social, and environmental indicators, such as the number of people benefited by means of the biodigesters, the number of biodigesters installed, and the volume of greenhouse gases mitigated, among others.

Data collection is carried out in the production units for six months from the first day of the intervention, the time needed to measure the impact on each one of the producers, who receive personalized professional assistance to gather the necessary information.

This information system allows to see the results of Sistema.bio’s intervention and helps CO_Capital follow-up of the company’s activities.

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“Sistema.bio [...] has defined all the impact metrics and reports them to us quarterly.” Anca Huzum, Finance and Operations Director, CO_Capital

In just under a year from CO_Capital’s first investment, the results achieved exceeded the initial projections. In 2019⁸ alone, Sistema.bio achieved:

- 1... 11,971 systems installed
- 2... 71,826 people have access to clean and renewable energy
- 3... 162.814 tons of CO2 mitigated
- 4... More than 10 million tons of waste treated
- 5... More than 2.4 million trees preserved

Thus, Sistema.bio attained and exceeded the financial, social, and environmental results projected by CO_Capital, and doubled its sales to 6000 units compared to 2018, with USD 4 million in revenue.

CO_Capital has not defined an exit strategy for Sistema.bio. Its main concern is to ensure long-term growth, and not to “force the sale” of the company.



LEARNING AND PERSPECTIVES

CO_Plataforma and CO_Capital have been key to the growth of this social business. The fact that the latter has a support ecosystem that allows it to become stronger helps mitigate risk significantly.

In addition, CO_Capital’s participation helped encourage other funders to continue investing in Sistema.bio.

⁸ Mexico accounts for around 40% of the accumulated impact generated by Sistema.bio.

For the supported company, the main takeaway from its partnership with CO_ is that capital does not have to be “black or white.” Income mobilization across the capital continuum is possible and desirable for social businesses, if good savings and capital practices are followed.

Likewise, a profitable business model has great power to generate and multiply social impact. This requires learning from non-governmental organizations, but also from successful traditional businesses. In this way, it is possible to have a “first-class” business that measures its results according to the social impact.

The economic crisis caused by COVID-19 is posing new challenges for financial sustainability and a general discouragement among investors to finance this type of initiatives. In this context, support beyond financing becomes strategic. In the case of Sistema.bio, the pandemic slowed down its growth, so it has opted to invest most of the financing in working capital while sales rebound.

CO_Capital and CO_Plataforma are operating in a very synergic way with very positive results, showing that investing for impact with financial returns is possible, and that fruitful partnerships can be established to that end.

For the supported company, the main takeaway from its partnership with CO_ is that capital does not have to be “black or white”.

“Our philosophy and perhaps recommendation is that you should not wait for business to knock on your door. We must seek, build, and strengthen the ecosystem of entrepreneurs who are doing an extraordinary job and support them with different tools over time”. Tania Rodriguez, CO_ co-founder and CEO.