Tierra Grata



tierragrata.org





Profiling Businesses in the Care Economy

The care economy consists of paid and unpaid labor and services that support caregiving in all its forms. In Africa, Asia and Latin America, women spend between three to five times as many hours on unpaid care and domestic work as men. This represents 80 percent of a household's total hours devoted to unpaid care work.

Care economy businesses can help recognize, redistribute, reduce and reward – also known as the 4 Rs – unpaid and paid care and domestic work in the following ways:



Recognize: Initiatives that increase visibility and recognition of paid and unpaid care and domestic activity as "productive" work that creates real value and contributes to economies and societies.



Redistribute: Services and initiatives that redistribute care work from individuals to public and private sector entities, and redistribute care and domestic work within the household.



Reduce: Products and initiatives that reduce the time spent on and burden of unpaid care and domestic work.



Reward: Products, services and initiatives that ensure that care and domestic workers are paid fairly and have professional growth potential. This provides them with financial reward and security.

The Care Economy Knowledge Hub aims to address the knowledge gap around care businesses by showcasing various business models and creating a resource base for relevant stakeholders. It also aims to raise awareness and increase knowledge of the state of impact-driven care economy business models and attract a broad range of funders to invest in care economy solutions by showcasing opportunities. These business profiles are intended to showcase said potential investment opportunities. They have been created from information and data provided by the business itself.

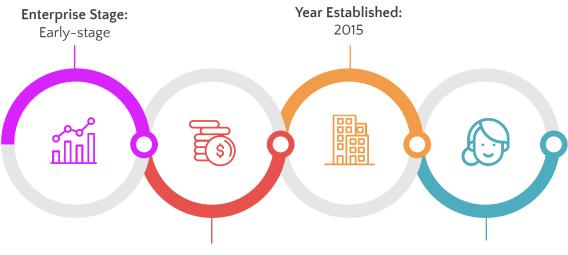
This project is supported by Canada's International Development Research Center, in partnership with the Soros Economic Development Fund at the Open Society Foundations. Building on their track record and commitment to transforming the care economy and mobilizing finance for gender equality, they have jointly launched this action research program to help transform the care economy through impact business and investment.



Executive Summary



Tierra Grata is a for-profit social enterprise that develops and implements energy, water, and sanitation solutions for rural villages in Colombia. Its products include solar panels, portable solar lamps, drip water filters, and ecological dry toilets. These products are low-cost, environmentally friendly, and easy and fast to install. In addition, Tierra Grata offers capacity-strengthening to customers and beneficiaries to improve their knowledge of and skills to repair and maintain all products installed. Tierra Grata has served 12,500 customers in 48 rural villages across Colombia's Caribbean and Pacific regions, focusing mainly on vulnerable Afro-Colombian and indigenous populations. The company reported US\$ 165,503 in revenues in 2021 and currently has nine employees.



Enterprise Type: For-profit social enterprise

Women Owned/Led:*

- Founded by at least one woman
- At least 30% of the board of directors is composed of women

Company Contact

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^{*}According to 2X "women entrepreneurship" and "women leadership" criteria; 2X Challenge Criteria



1. About The Enterprise

1.1 Problem

It is estimated that 4% of the Colombian population lacks access to electricity, 14% to clean water,¹ and 30% to safe sanitation and sewage systems.² These limitations negatively affect communities' health, well-being, and safety, especially for women and children. Given women's role in household water collection, they are at an increased risk of exposure to disease.³ Additionally, lack of access to clean water, sanitation, and sewage is associated with higher levels of school absenteeism during menstruation and increased gynecological complications.⁴

Constraints to accessing electricity, water, and sanitation are an extra burden on women's domestic and care work. In such scenarios, children are more prone to drop out of school⁵ and spend more time at home, and children and the elderly are more likely to get gastrointestinal diseases that increase their need for care due to illness.⁶ In addition, household chores such as cleaning, laundry, and cooking are more time-consuming, decreasing women's availability for paid labor or leisure.

1.2 Solution

Tierra Grata addresses the lack of access to electricity, clean water supply, and safe sanitation by providing affordable, environmentally friendly, and non-polluting products to low-income households in rural areas. Products include: 1) solar panel lighting for public spaces, such as streets, parks, squares, and community rooms; 2) solar energy systems for homes; 3) portable solar generators;⁷ 4) drip water filters; and 5) ecological dry toilets (non-flush toilets) for households.

¹ Water Aid. (2020). Colombia. Retrieved from

 $[\]frac{\text{https://www.wateraid.org/us/where-we-work/colombia\#:-:text=14\%25\%20of\%20people\%20in\%20rural.people\%20without\%20this\%20basic\%20right}{\text{pht}}$

² OCHA Services (2021). WASH Colombia: Situation Report First Quarter 2021. Retrieved from https://reliefweb.int/report/colombia/wash-colombia-situation-report-first-quarter-2021

³ World Health Organization. (2011). Taking Sex and Gender Into Account in Emerging Infectious Disease Programmes: An Analytical Framework. Retrieved from

 $[\]frac{\text{http://apps.who.int/iris/handle/10665/207693?search-result=true\&query=taking+sex+and+gender+into+account\&scope=\&rpp=10\&sort_by=score\&order=desc}{\text{der=desc}}$

⁴ Sommer, M., et al. (2016). A time for global action: addressing girls' menstrual hygiene management needs in schools. *PLOS Med.* 13:e1001962. DOI: 10.1371/journal.pmed.1001962

⁵ The Economic Times. (2020). Access to electricity increases literacy rates: Economic Survey. Retrieved from:

https://economictimes.indiatimes.com/industry/services/education/access-to-electricity-increases-literacy-rates-economic-survey/articleshow/73 826482.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

⁶ World Health Organization. (2022). Sanitation. Retrieved from https://www.who.int/news-room/fact-sheets/detail/sanitation

 $^{^{\}rm 7}$ It includes lighting and USB ports to charge small devices.

These products improve the household and village population's well-being and health outcomes while reducing time spent on domestic chores, such as fetching potable water for bathing or cooking, and providing public lighting that increases safety. Customers pay for Tierra Grata's products through an interest-free credit with income-adjusted monthly payments. In addition, municipalities and Community Action Boards⁸ can purchase Tierra Grata's products for use in public spaces. Similarly, private companies and Non-Governmental Organizations (NGOs) can design and tailor projects that enable communities to benefit from several products.

All of Tierra Grata's products are coupled with a social intervention model based on good practices and experiences with previously implemented projects. This model builds rural villagers' capacity by teaching them pre-installation, installation, and post-installation techniques for various products. The social intervention also proposes that rural villages elect and establish a technical team in charge of repairs and maintenance, guaranteeing product management and sustainability. The social intervention model also identifes discriminatory gender norms within communities and provides awareness campaigns to promote women's rights.

Tierra Grata also creates income generating opportunities for women in these villages.⁹ For example, rural women can sell Tierra Grata products, contributing to their livelihoods and increasing their social standing.

1.3 Customer Segment

Customer Segment	Product / Service Provided	Paid / Unpaid
Private companies, foundations, NGOs, municipalities, Community Action Boards	Energy solutions: Tierra Grata provides: 1) Solar panel lighting for public spaces, such as streets, parks, squares, and community rooms. 2) Portable solar generators that work as flashlights, and include USB ports to charge phones and to plug in small radios.	Paid: Private companies, foundations, and NGOs commission Tierra Grata to deliver projects that install some or all available products at specific villages. Municipalities and Community Action Boards also purchase some Tierra Grata products.

⁸ Community Action Boards are local civic, social and community management organizations with legal capacity and private property rights, made up of residents who volunteer to identify, formulate, execute, manage and evaluate community development plans, programs and projects. https://latinno.net/en/case/5111/

⁹ This component is still in the pilot phase.

Customer Segment	Product / Service Provided	Paid / Unpaid
Households and informal businesses ¹⁰	Energy solutions: Households can buy 1) solar energy systems to power four light bulbs, cell phones, radios, and other small appliances; and 2) portable solar generators. Clean water solutions: The business	Paid: Households and informal businesses can purchase individual solutions directly from Tierra Grata or its resellers.
	provides filters to treat drinking water and enable families to purify 40 liters daily and store up to 20 liters.	
	Sanitation solutions: Tierra Grata provides ecological dry-toilets (non-flush toilets) with a liquid and solid separator. The dry toilet works efficiently with a technology that combines a mixture of lime, sawdust, and ash to avoid odors and generate compost. It also has a separate space for a shower.	
Rural women entrepreneurs	Resellers (pilot phase): Tierra Grata offers the opportunity for rural women to purchase Tierra Grata products at reduced fees that they can pay in installments with no interest to resell in other villages. This pilot seeks to identify how rural women could become potential customers and partners for Tierra Grata to develop new markets in other rural towns.	Paid

¹⁰ According to the ILO, informal businesses refer to all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements.



1.4 Team And Governance Structure

Tierra Grata has nine employees; six full-time employees and three interns. One of the company's four women is the CEO, and leadership roles are held equally by women and men. Tierra Grata has a three-person advisory board (1 man, 2 women) with work experience in accelerators and incubators. They are experts in sanitation, business strategy, and energy.

1.5 Enterprise Policies

Policy	Yes / No	
An overall HR Policy	Yes	
Equal pay for equivalent work policy		
Non-discrimination / Equal employment opportunity / Diversity and inclusion policy (gender, LGBTQ, PWD, etc.)	No	
Anti bullying and sexual harassment policy / Respectful workplaces	No	
Whistleblower policy / Employee grievance mechanism		
Maternity / Paternity leave policy		
Safeguarding policies for vulnerable groups (children, elderly, PWDs)		
Safeguarding policies for the environment or to reduce detrimental impact on the environment (covers reducing carbon footprint, reduced water consumption etc.)		

2. Impact

2.1 Mission Statement

Tierra Grata is a social enterprise that develops and implements decentralized solutions for essential services such as energy, water, and sanitation in rural communities.



2.2 Intended Impact

Although Tierra Grata originally began as a business that did not intentionally tackle Care Economy issues, the company's solutions positively impact women and increase their time availability considering that:

• It **reduces** women's time for domestic and caregiving activities through clean water and electricity supply. Since women have these services at their disposal, they do not need to fetch water, cooking time decreases, and children and the elderly get sick less often; when they do, the quality of care and caring also improve.

2.3 Monitoring And Measurement

Tierra Grata measures its production, the number of customers and beneficiaries, and the quality of products and services delivered. Tierra Grata surveys rural villagers before and after solutions have been installed to assess whether the intervention was implemented according to the community's objectives. All responses, feedback, lessons learned, and good practices are documented in a final report which Tierra Grata shares with customers and beneficiaries in the spirit of transparency.

2.4 Results To Date

- 12,000 beneficiaries
- 48 rural villages
- 1,614 installed products or solutions

Tierra Grata's work is aligned to the following Sustainable Development Goals (SDGs):















3. Financials

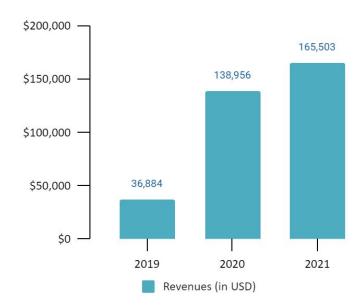
3.1 Financial Status

Tierra Grata's CEO reports the company is financially sustainable.

(Amounts in US\$)	FY 2019	FY 2020	FY 2021
Total Revenue	36,884	138,956	165,503
Total Expenses	52,727	113,576	109,451
EBITDA OR Profit/ Loss			
EBITDA Margin			

3.1.1 Revenue Streams

In 2021, around 26% of Tierra Grata's income came from donations (from private companies and NGOs), and the rest from household payments. The graphic below depicts details on past revenue. Between 2019 and 2020, Tierra Grata's revenue grew by 277%, and between 2020 and 2021, it grew by 19%.



3.1.2 Expenses

This information is unavailable. Tierra Grata can be contacted directly for further information.



3.2 External Funding Sources (Past and Current)

Tierra Grata has received grants and donations from private companies such as Reckitt-Multinational mass-market hygiene products; philanthropic foundations, such as the Bill & Melinda Gates Foundation; NGOs, such as IsraAID; multilateral organizations, such as the United Nations Development Program; and media companies, such as, CNN International, when the CEO won the CNN Heroes award in 2021.

3.3 Challenges Faced In Accessing Capital

Constraints in accessing capital: Tierra Grata's CEO reports that securing an initial
investment via debt could help the company to produce and deliver products while
customers pay for them, enabling Tierra Grata to scale faster, without depending on
cash flow. However, accessing such an investment has been challenging for the
company since some investors may be hesitant to fund an enterprise with a target
market of low-income customers.

4. Path To Scalability

4.1 Potential Avenues For Growth

Tierra Grata has identified the following avenue for growth:

• Geographic expansion: Tierra Grata plans to explore new markets overseas once it consolidates its presence in Colombia. Through 2023, Tierra Grata intends to expand its presence in the Caribbean and Pacific regions where the company currently operates, and where there is high demand for electricity, clean water, and sanitation services from rural villages. Within two to three years, the goal is to start operations elsewhere in Latin America, possibly Peru, due to market similarities with Colombia.

4.2 Risks And Challenges

This information is unavailable. Tierra Grata can be contacted directly for further information.



4.3 COVID-19 Impact On The Enterprise

2020 was the best year for Tierra Grata in terms of new partnerships and sales. The company partnered with One Young World and other local allies to launch the "Hygiene Grata" program as a COVID-19 prevention strategy. This program delivered water filters, hand-washing sinks, hygiene kits, and developed rural educational campaigns. The program involved changing habits and behaviors related to hygiene and sanitation practices such as hand washing and water treatment to prevent and reduce morbidity and mortality associated with waterborne diseases.

4.4 Support Received To Date

Tierra Grata has received technical assistance from Dell and other accelerators in Colombia, such as Recon, Yunus Social Business Impact Hub, and Bancolombia's Foundation.

4.5 Inputs Required For Growth

- **Financial:** The company is seeking US\$ 200,000 to US\$ 600,000 to expand geographically and invest in electricity products, which have the highest payback rate at 95%. As for the type of capital, the company is seeking low-interest debt deferred over four installments (which corresponds to the average time it takes households to pay) or equity in partnership with another company that shares Tierra Grata's values. Financial support could come from financial institutions that lend microcredit to households to purchase Tierra Grata products.
- Non-financial: The company needs to strengthen its supply chain, especially transportation (air and ground transportation alternatives), or more ambitiously, develop strategic partnerships with logistics operators that manage product transportation, storage, and distribution. In addition, Tierra Grata is seeking increased government support from the Ministries of Housing, Water and Basic Sanitation, and Mines and Energy for Tierra Grata to become a service provider for rural villages that lack access to electricity, potable water, and sanitation.