ShelterTech Andean Market Landscape

Regional analysis and recommendations

JUNE-2020

Dalberg
Overview of the study

• The Terwilliger Center for Innovation in Shelter (TCIS) was launched by Habitat for Humanity in 2016 to support companies expanding innovative services and products to better meet the housing needs of low-income households.

• TCIS launched the ShelterTech Accelerator Program to identify and accelerate shelter entrepreneurs in Mexico, Kenya and India in 2017-2018.

• As part of its 2020 strategy, TCIS plans to launch the first regional ShelterTech program for the Andean Region in second half of 2020.

• The following study aims to identify the actors supporting the social impact ecosystem in the Andean Region, the opportunities and gaps that exist in addressing the shelter and adjacent sector needs regarding entrepreneurship and innovation, and the effects arising from the COVID-19 health crisis in the shelter sector.

• This study was conducted between April and June 2020 through documentary research and stakeholder and expert interviews.

• Countries of focus include Argentina, Bolivia, Chile, Colombia, Ecuador, and Peru.*

*These six countries are referred to as Andean Region for the purposes of this study.
Executive Summary (I/IV)

- **The Terwilliger Center for Innovation in Shelter at Habitat for Humanity is interested in supporting the shelter entrepreneurship ecosystem in the Andean region.** As part of that effort, Dalberg conducted a study to understand the opportunities and limitations of entrepreneurs in the shelter sector, trends in acceleration and incubation programs, and the opportunities and barriers for investors in Argentina, Bolivia, Chile, Colombia, Ecuador, and Peru. To conduct this study, the Dalberg team leveraged reports from international organizations regarding the impact investing and housing industry in the region and, conducted 34 interviews with regional entrepreneurs, capacity developers, ecosystem builders, investors, and experts in the field.

- **Quality and affordability of housing remains a key challenge in the Andean region.** Of the total housing deficit in urban areas in Latin America, 6% corresponds to a quantitative deficit, while 94% is a qualitative deficit. Land prices, informal land acquisition strategies, high cost of construction inputs with limited access to financing and prevalence of informal markets and self construction, all contribute to the deficit that impacts 11.2 million families across the Andean Region. Expanding the stock of high quality, affordable and resilient housing is an overseen opportunity for innovation, entrepreneurship, and investment in the region.

- **In recent years, the entrepreneurship ecosystem in the Andean region has expanded, at different pace in each country, with social entrepreneurship also gaining traction.** Across the region, governments are actively working to support entrepreneurs with funding and capacity; presence of local and international investors is expanding; as well as that of capacity developers; universities and large private sector organizations playing a more active role in the ecosystem. Within this landscape, social entrepreneurship is also growing, thanks to organizations such as NESst, IMPAQTO, Ashoka, and Sistema B, among others. However, there is room for growth, particularly in the shelter sector. Most social startups are microfinance or technology ventures.

- **Shelter sector entrepreneurs are mostly characterized as niche ventures,** that create innovative products and services to target niche markets and while they seek to grow often prioritize goals other than scale. They usually require risk capital early in their journey for R&D and product development and face a mismatch with investors on scale, risk, return and impact expectations. Even those operating in the affordable housing sector, struggle to define, measure and communicate their impact to investors. Entrepreneurs in the sector often come from engineering or architectural background and lack the business and management skills required to efficiently run their organization and engage with investors. Women entrepreneurs face additional challenges to access capital and build networks in a male dominated sector. One sub-sector to monitor is PropTech, as it continues to grow it might expand to affordable housing.
Executive Summary (II/IV)

• **Shelter entrepreneurs must address specific barriers to capture local demand.** Governments play a large role in new housing development and construction for the low-income population. Public procurement programs are highly bureaucratic at best and corrupt at worst, limiting opportunities for entrepreneurs to participate. Formal housing finance is limited for lower income populations; demanding entrepreneurs to incorporate financing plans into their business model. Consumers’ housing needs and traditional preferences pose a barrier for more innovative and cost-effective housing solutions.

• **Impact investment in the region continues to grow, however shelter represents only 3% of total investments.** Impact investment amounted to USD $1,443 M between 2016-17 with a more diverse set of sectors and deals (according to the lastest data from ANDE/LAVCA). More and bigger funds are emerging in the region. The main challenge for investors is a mismatch between their expectations regarding track record, return and ticket size vs. the earlier stage and smaller opportunities in the region. Investors that face limited exit options due to less developed financial markets and lower growth projections are moving toward structured exits and revenue-based instruments to better match the markets.

• **The number of incubation and acceleration programs has expanded rapidly, with a wide range of structures, services, and quality levels.** The momentum on entrepreneurship has prompted Andean governments to create support infrastructure for entrepreneurs and capacity building programs, and international programs to expand its operation in the region. An opportunity remains to closely match the program offerings with Andean entrepreneurs’ needs. While workshops and seminars are widely spread, mentoring, peer to peer networks, and access to market are highly valued by entrepreneurs and not as common in the region. Capacity development programs are evolving their programs to diversify their sources of revenue, establishing strong networks to improve recruiting and to expand their access to high-quality mentors to support entrepreneurs. Most programs are non-sector specific (Masisa Lab in Chile being the exception for shelter), which limits their potential to offer highly tailored support.

• **The COVID-19 crisis is having a significant impact across all actors in the ecosystem.** COVID-19 has brought the relationship between health and housing into sharp focus as overcrowding has been directly linked to higher risk of contagion and death and given the critical need for access to water and sanitation. Entrepreneurs are facing decreased sales and slow down in production due to quarantine measures. In some cases, they are reinventing their products and services and accelerating their digital transformation. Investors are focused on protecting their existing portfolio through funding flexibility and management support. Some, recognize an opportunity as companies are in need of additional investment. Capacity developers are also working in supporting entrepreneurs by generating content on crisis management and cash management. They have also moved their services to digital platforms, however, are seeing a steep decrease in revenue and many need bridge financing to survive.
Executive Summary (III/IV)

- **TCIS is well positioned to catalyze the shelter entrepreneurship sector in the region as a capacity developer, convener, funder or advocate.** The role it decides to play and how it defines it short and long-term objective will define key aspects of the ShelterTech program such as: entrepreneurship selection, services offered program format, partners and format, and metrics
  - **Objective:** In addition to supporting specific entrepreneurs, ShelterTech can raise the profile of the sector among investors and entrepreneurs, clarify the impact case and provide proof of concept. It can also support the integration of the ecosystem. Both of these objectives require a longer-term view than the duration of the program but could lead to longer term impact. Prioritizing innovation and potential for scale can further facilitate these objectives by creating success stories
  - **Entrepreneur Selection:** Given the diverse contexts across the 6 countries, prioritizing a smaller set of countries can enable TCIS to concentrate its efforts and build stronger partnerships and networks. A sector specific accelerator, of enterprises with a proven model vs. earlier stage organization could be more catalytic. The analysis of the housing stock in the region suggest that home improvement is better aligned with the regional needs vs. the rest of the shelter subsectors. On one hand, Colombia and Chile, followed by Peru have a more mature and innovation-driven entrepreneurial ecosystem which may facilitate identifying entrepreneurs set up for growth. On the other hand, Ecuador and Bolivia, have a higher housing deficit and less developed entrepreneurship ecosystem, and therefore might present a larger opportunity for impact.
  - **Services Offered:** Highly targeted programs deliver the most value to entrepreneurs. Services that are most needed are need-based programming defined based on a need assessment at entry, dedicated and personalized business mentoring, access to market and peer to peer networking. The topics highlighted by entrepreneurs as most needed include investment structures, legal counseling, market research and digital skills
  - **Partners and Mentors:** the success of a regional program will rely on its ability to establish a wide range of local partners and collaborators that include public sector agencies, universities, industry associations and ecosystem builders. Mentors should be local, sector specific, trained on social entrepreneurship and committed for the long-term.
  - **Program Format:** Entrepreneurs report that a “learning-by-doing” approach is most beneficial where entrepreneurs have enough time to apply learnings to their business. Given the need for remote facilitation in the context of COVID-19, ShelterTech should leverage new tools and formats and invest in trust building activities
  - **Metrics and Tracking:** Create channels and mechanisms for continuous feedback. Establish a performance monitoring mechanisms to measure revenue, profit, employment and investment received (if any) and secure commitment from entrepreneurs to provide data over a multi-year period
The six countries assessed in the study present a wide range in the stage of development and strength of the support services to social entrepreneurs

- **Argentina** has set up a solid foundation for the development of the entrepreneurial ecosystem; but the country’s macroeconomic situation prevents the ecosystem’s growth. In 2016-17, impact investments were USD $66 M. Top investment sectors were agriculture and science. Accelerators are a small percentage of the capacity development programs. The Ministry of Production oversees support programs for entrepreneurs, such as seed funds and training.

- **Bolivia** has the highest housing deficit in the Andean Region. However, the entrepreneurial ecosystem is very nascent, due to government and legal barriers for doing business. For the 2016-17 period, impact investments totalled USD $40 M, most of these in microfinance. There is little presence of international capacity developers.

- **Chile** has the most developed entrepreneurial ecosystem in the Andean Region, by in large strengthen by public sector organizations, such as StartUp Chile, that provide funds to national and foreign entrepreneurs based in Chile. For the 2016-17 period, impact investments were only USD$ 9 M, signaling an important growth opportunity. Most of these investments were in agriculture and technology (22% in MFI). There is a wide range of capacity developers.

- **Colombia** has significant housing needs and has a well-developed entrepreneurial ecosystem, which provides a balance between market need and ease of doing business. Colombia is an emerging hub for innovation, driven by government programs such as Fondo Emprender and Economía Naranja. Impact investments represented USD $86 M in 2016-17. There is a diverse range of capacity developers, with big support from the private sector.

- **Ecuador** has a nascent entrepreneurial ecosystem, but an important demand opportunity for high-quality housing. The smack market compared to the other countries in the region tends to discourage investors looking for growth. For the 2016-17 period, impact investments were USD $ 185 M. As a dollarized economy, the risk of currency exchange for foreign investors is reduced. The ecosystem has grown thanks to actors such as ConQuito and AEI.

- **Peru** has a growing entrepreneurial ecosystem, where the greatest needs are related to sanitation. For the 2016-17 period, impact investments were USD $ 218 M (the majority in MFI). University-based incubator programs represent a large percentage of the total incubator/accelerator offer.
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Quality and affordability of housing are key challenges in the Andean region

Housing challenge

- The region’s key challenge is not quantity but quality of housing. In LATAM, 45% of households have some type of housing deficit; 70% of these households live in urban areas. Within urban areas, when comparing the qualitative and quantitative deficits, the qualitative deficit corresponds to 94% of the total deficit. According to a 2019 IDB study, closing the qualitative gap in LATAM would require an investment of 30 B USD, with an investment of USD 3,000 per household.

- However, public sector investments in the region are mostly focused on new developments and construction and not on improving the existing stock and the communities around them.

Key Barriers

- Structural issues to better housing include land prices, informal land acquisition strategies, and affordability due to lack of flexible finance and high costs of construction and key inputs.

- The production and consumption of land and housing primarily takes place outside formal markets – incremental housing development with the occupant's resources and labor is the standard.

- Formal housing finance is limited for lower income populations: household savings, remittances, and micro loans, are the principal mean of financing.

Expanding the stock of high quality, affordable and resilient housing is an overseen opportunity for innovation, entrepreneurship, and investment in the region.
Social entrepreneurs are socially-motivated leaders with innovative solutions to the world’s most pressing social challenges

THEIR OBJECTIVE
• Develop innovative business solutions to address social, cultural and environmental problems

WHAT DRIVES THEM
• Society and their most pressing needs as well as financial sustainability are the core of their business strategy

HOW THEY MEASURE SUCCESS
• Success is defined by widespread improvements in their communities, and it’s measured through social and environmental metrics in addition to more traditional metrics such as revenue/profit

AREAS OF FOCUS
• Examples include microfinance, educational programs and healthcare

Source: Ashoka, Investopedia, Dalberg analysis
### The entrepreneurship ecosystem in the Andean region is expanding rapidly, including for social entrepreneurs

#### The entrepreneurship ecosystem in the Andean region is experiencing remarkable growth...

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<tbody>
<tr>
<td><img src="image" alt="Network" /></td>
<td>Governments increasingly committed to entrepreneurship with dedicated programs, and more business-friendly regulations</td>
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<td><img src="image" alt="Water" /></td>
<td>International PE/VC funds increasingly focused in Andean countries with more local investors joining the ecosystem in the last few years</td>
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<tr>
<td><img src="image" alt="Coin" /></td>
<td>International and local capacity building programs are strengthening its presence in the region with more and better services</td>
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<tr>
<td><img src="image" alt="Shake Hands" /></td>
<td>More partnerships between large private companies and the startups ecosystem through its own accelerator programs or funding</td>
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<tr>
<td><img src="image" alt="Phone" /></td>
<td>Tech startups are leading the ecosystem due to higher smartphone penetration and availability of tech-accelerator programs and capital</td>
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#### ...with social entrepreneurship playing a key role in this expansion

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<tbody>
<tr>
<td><img src="image" alt="Hand Stop" /></td>
<td>Increase in capacity building initiatives to involve more startups in solving social and environmental issues (e.g. IMPAQTO, Socialab, Ashoka)</td>
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<tr>
<td><img src="image" alt="Coin" /></td>
<td>Increasing shift toward locally-based and region-specific impact-investment funds by organizations such as NESsT, Acumen and Agora</td>
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<tr>
<td><img src="image" alt="Sistema B" /></td>
<td>Since 2012, Sistema B (B Corp’s Latin American branch) has taken on more than 450 members in the Andean Region</td>
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<tr>
<td><img src="image" alt="Measuring Tape" /></td>
<td>Increasing requests from funders to measure social impact</td>
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<tr>
<td><img src="image" alt="Block" /></td>
<td>Top sectors of focus are communication technology, financial services, and agriculture, with few startups focusing in the shelter sector</td>
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*In the following pages, we will describe the barriers that still need to be addressed in the Andean entrepreneurship ecosystem*

Source: OECD, GALI, Dalberg analysis
Potential opportunity as PropTech, a growing area of investment in LatAm, expands to affordable housing in developed markets

PropTech (real estate startups) moving to the shelter sector

- Most PropTech startups in the shelter sector are seeking to solve access to information on real estate, and operational aspects such as notary services and land tenure
- Specific services targeted at shelter sector are down payment alternatives, unlocking equity and offering non-traditional financing options
- In February 2019, MetaProp, the most active early-stage PropTech investor globally, announced its plans to invest $5 MM USD in startups addressing the affordability housing crisis in the US
- Tech giants like Amazon and Facebook made forays into the sector in 2019, experts predict that these companies will leverage their data to create complimentary PropTech offerings (e.g. in October 2019, Facebook announced $1B affordable housing initiative with the California State Government)

Latin American entrepreneurs are starting to develop innovative PropTech solutions

- PropTech in Latin America is still nascent, with most entrepreneurs concentrated in Brazil and Mexico
- In 2018, PropTech made up 4% of total capital committed by VCs in Latin America, with 479.5 MM USD invested across 12 deals
- Cutting edge PropTech solutions in the region include 3D technology to show customers real estate, data management of the properties, building administration, and home equity management
- Ecosystem actors are creating new forums such as the PropTech LATAM Summit to discuss innovative solutions to solve the housing crisis
- As sector continues to grow in the region, companies might expand to develop specific service offerings for low-income households

Global PropTech Startups in Shelter Sector

- Rentlogic
- POINT
- PadSplit
- Lemonade

LATAM PropTech Startups

- Suyo
- loft
- Houm
- ComunidadFeliz
- alquilando
- Flat
- lugaren

Source: LAVCA, Washington Post, University of Oxford, IDB, Dalberg analysis
The region hosts a wide range of actors across categories, with unique objectives, strengths and value for entrepreneurs

- Not exhaustive -

**Investors**
- **Public sector**: SERCOTEC, COFIDE, Fondo Emprender
- **PE/ VC**: Ashmore
- **Impact investors**: NESsT, Acumen, PomonaImpact, Inversor
- **Philanthropic**: HfH
- **Multilateral**: IDBLab

**Capacity Developers**
- **Public sector**: StartUp Chile, Innovate Perú, ConQuito
- **University based**: EmprendeUP, UPCP, 
- **Investor driven**: AGORA, Endeavor
- **Independent**: IMPAQTO, Ashoka, AEI, Socialab, DRIMCOM
- **Private company**: Kunan, Wayra, Fundación Bolívar Davivienda
- **Shelter sector/ private**: MASISA Lab

**Ecosystem Builders**
- **Networks**: ANDE, ASECH, Sistema B
- **Researchers**: Universidad de los Andes
- **Chambers of Commerce**: SENESCYT Ecuador,
- **Public sector**: CORFO, Ruta N Medellín
- **Foundations**: Emprender Futuro, Viva Idea, Fundación Chile

**Shelter Entrepreneurs**
- **Housing**: DICCON
- **Construction materials**: Ecuaplastic, Conceptos Plásticos
- **Energy**: SunColombia, LUTW
- **WASH**: Freshwater, Módulo sanitario, Yakupura
- **Proptech**: Suyo, Houm, ViaBanexo

Country-specific lists of stakeholders available in each country analysis
The COVID-19 pandemic has brought the relationship between health and housing quality into sharp focus

<table>
<thead>
<tr>
<th>Key Risk Factors</th>
<th>COVID-19 implications</th>
</tr>
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</table>
| Overcrowding     | • Overcrowding increases likelihood of contagion, given main routes of transmission are respiratory droplets and direct contact with infected people  
                    • Economic crisis is forcing many low-income families who can’t afford to rent their own places, to move with friends or relatives  
                    • Social housing tenants, are disproportionately likely to be overcrowded and part of the essential workforce (e.g. bus drivers, shop workers), thus more likely to be exposed to the virus and bring it back to their overcrowded homes  
                    • People living in inadequate housing often already suffer from chronic diseases and underlying conditions that make them more susceptible to COVID-19  |
| Poor access to sanitation and potable water | • Population living in informal housing tend to have insufficient sanitation facilities and limited access to water, making regular hand-washing and surface disinfection difficult  
                    • Faulty plumbing and poorly designed air ventilation system could contribute to the aerosolized spread of respiratory viruses due to unsafe fecal waste practices  |

*Home improvement and access to basic services are more relevant than ever, but reductions in income levels for vulnerable population increase the barriers to access*
# Its impact has also reached every type of stakeholder in the shelter entrepreneurship ecosystem

**Shelter Entrepreneurs**

- **Decreased sales** due to closed markets and inability to reach consumers
- **Slow down in production** due to closed sectors e.g. construction, non-essential manufacturing
- **Reinventing their products and services** to support the crisis e.g. offer virtual tours of homes or launch e-commerce
- **Postpone tax and procurement payments** in order to prioritize payroll
- **Closed operations** indefinitely or permanently

**Investors**

- **Delaying new investments** as travel restrictions limits their ability to conduct due-diligence
- **Actively protecting existing portfolio** by increasing flexibility and emergency funding and providing operational support
- **Lower risk appetite** due to economic downturn
- **Increased focus on structured exits**, to protect investments
- **Streamlining efforts** to address social and economic effects of the pandemic, when possible

**Capacity Developers**

- **Actively working to support entrepreneurs** in managing the economic crisis and adapting their business models
- **Moving to digital service models** to continue with operations
- **Increased focus** on startups with online delivery models/ e-commerce channels
- **Reduction in revenue** for those that rely on entrepreneurs’ fees or donations
- **In need of bridge financing** to survive until business recovers

Source: IDB, Forbes, Devex, Dalberg analysis
SHELTER SECTOR ENTREPRENEURS
Across the four segments for SGBs and entrepreneurs, shelter sector entrepreneurs are mostly niche ventures

**Segmentation Model for Small and Growing Businesses**

- **HIGH GROWTH VENTURES**
  - Disruptive business models and targeting large addressable markets
  - High growth and scale potential, and are typically led by ambitious entrepreneurs with significant risk tolerance

- **NICHE VENTURES**
  - Create *innovative products and services* that target niche markets or customer segments
  - Entrepreneurs who seek to grow, but often *prioritize goals other than scale*

- **DYNAMIC ENTERPRISES**
  - Operate in established “bread and butter” industries - e.g., trading, manufacturing,
  - Deploy existing products / proven business models; grow through market extension/ Moderate growth and scale potential

- **LIVELIHOOD-SUSTAINING ENTERPRISES**
  - Opportunity-driven, family-run businesses on the path to incremental growth
  - May be formal or informal, and operate on a small scale to maintain a source of income for an individual family

The segmentation model used three variables: Market growth and scale potential, Product or service innovation profile, Entrepreneur behavioral attributes

**Financing Needs**

- Niche Ventures often require risk capital early in their journey in the process of launching an innovative product or service. We distinguish two types:
  - *Product-based Innovators* tend to have higher costs related to product R&D, getting products to market, and scaling (e.g. X-Runner, Módulo sanitario)
  - *Service-based Innovators*, which tend to have more limited financing needs and shorter working capital cycles. (e.g. SUYO, ViaBanexo)

- Once they have proven their business models and established a track record of performance, Niche Venture enterprises can benefit from a wider array of financial services from mainstream financial institutions—such as lines of credit, asset financing, and other lending products

**Market Gaps**

- Lack of early stage financing for innovators with promising products and services that don’t have large ambition to scale and have limited exit prospects
- This sometimes leads niche business entrepreneurs to seek out venture capital in the absence of other viable sources of risk capital and can lead to wasted time and effort—enterprises pitching to investors with quite different expectations for risk, return, and impact

Source: Segmenting Enterprises to Better Understand Their Financial Needs, ON, CFF, Dalberg analysis
Niche ventures are highly impacted by the “scale potential” mismatch, in particular in the smaller markets in the region.

<table>
<thead>
<tr>
<th>FINANCIAL NEEDS</th>
<th>Early Stage</th>
<th>Growth Stage</th>
<th>Mature Stage</th>
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</table>
| Primary financing needs | • Initial set-up  
• R&D & prototypes  
• Product-market fit | • Working capital  
• Product development  
• Asset finance  
• Growth capital / opex | • Working capital  
• Asset finance  
• Refinancing |
| SGBs’ primary considerations | 1. Right type of capital | Previous, plus 1. Right amount of capital | Previous, plus 1. Capital at an affordable cost |
| PROVIDERS | Early Stage | Growth Stage | Mature Stage |
| Existing providers | • Grant-makers  
• Seed challenges | • Impact funds  
• Non-bank financial institution | • Banks  
• Non-bank financial institution |
| Providers’ primary challenges | 1. Lack of early-stage equity capital due to (real and perceived) smaller market potential and lower exit potential  
2. Long due-diligence process with non-traditional business models  
3. Relatively few options available beyond debt and equity  
4. High interest rates due to local cost of capital and/or banks’ unfamiliarity with the business model | | |
| REMAINING GAPS | Early Stage | Growth Stage | Mature Stage |
| Working capital | Very large gap. Grants and equity finance are growing but still relatively small; traditional investors do not fund due to risky model and limited market size. | Large gap. Cash-strapped firms cannot purchase inputs to complete orders in advance | Medium gap. A track record and predictable cash flow unlocks some capital and firms typically have more collateral to put up for cyclical costs |
| Capital expenditure | | Large gap. Assets for both production and distribution | |
| Operating expenses | | Large gap. Limited appetite to fund the growth for unproven niche markets | |

Source: Segmenting Enterprises to Better Understand Their Financial Needs, ON, CFF, Dalberg

There are many good ideas to innovate in the shelter sector, but not enough funding for entrepreneurs to go from the prototype to mass production.

Chilean entrepreneur

Measuring social impact to be able to work with impact investors is not easy…to be able to isolate the effect of a certain product is an expensive and long process.

Peruvian entrepreneur

We have tried to be sustainable, but we’d have to raise prices and families can’t afford our product. We partner with NGOs to cover our operational costs.

Argentinian Entrepreneur

We know there’s an investment gap in the shelter sector, but we haven’t seen any startups with track record of successful sales to invest on it.

Colombian Impact Investor
In addition to financing, shelter entrepreneurs in the region need support to expand their skills and improve their operations

**Management skills gaps**

- Lack of management skills for shelter entrepreneurs as most of them come from engineering or architectural backgrounds and traditional degrees offer limited business education
- Often, former clients, community or family members become employees due to their knowledge of the product, but lack appropriate management skills

*We hire salesman from the communities where we serve, but it's hard because they don't have the technical knowledge to sell the products well.*

**Lack of competitive salaries**

- Challenge to offer competitive salaries due to lower profits as most social enterprises are in early stages, forcing entrepreneurs to hire unexperienced personnel without the technical background required

**Excessive regulations**

- Entrepreneurs prefer to remain informal due to excessive regulations to set up enterprises
- Long bureaucratic processes to obtain necessary certifications to participate in public biddings for construction processes

*We need more and better legal advice, specialized in small companies like us. We have paid penalties because we didn’t know the proper procedures.*

**Mismatch between social and commercial objectives**

- Limited use of social impact measurement tools due to complex procedures and high costs
- Business models with no clear approach to balance social impact with a solid revenue generating mechanism

**High dependence on public funds or donations**

- High dependence on public funds or donations, affecting their long-term sustainability

Sources: Dalberg analysis
Entrepreneurs also face barriers to access demand and prosper in the national and regional shelter markets

**Policy and regulations**
- Large role of the government in social housing developments
- Highly bureaucratic processes to access government procurement processes (i.e. bribe payments are usually required to expedite processes)
- Limited opportunities to export due to lack of trade agreements and volatile exchange rates
- Complex process to obtain construction permits for private companies

  *It’s easier to stay informal, processes are long, expensive and complicated*
  Bolivian entrepreneur

**Price**
- Limited ability for target customers, particularly for countries with high inflation rates
- Lack of capital for house improvements
- Higher prices due to imported materials, sector informality and general lower margin level compared to regular startups

**Preferences and Competition**
- Limited access to mass distribution channels
- High competition with informal construction services
- Mismatch between products and low-income families’ needs
  - Preference for traditional construction methods and materials
- Low-income families tend to distrust private shelter companies

  *Families value price over quality, it’s difficult to compete with subsidized solar systems, even if our products have better quality*
  Peruvian entrepreneur

  *We have been able to grow thanks to our partnership with a large retailer, who distributes our products*
  Ecuadorian Entrepreneur

Sources: Dalberg analysis
Few and far apart – challenges are even bigger for women entrepreneurs in the shelter sector

“For female entrepreneurs in the shelter sector, the challenge is to make your work to be taken seriously by executives in constructions companies or government officials...they are not used to see women in this sector”

Bolivian female entrepreneur

ACCESS TO CAPITAL
• Limited access to finance due to lack of legal properties or other guarantees, thus affecting business performance

COMPETING PRIORITIES DUE TO TIME POVERTY
• Clash between the role of entrepreneur and the traditional role of mother and wife

HARDER TO BUILD CREDIBILITY IN THE INDUSTRY
• Hostile work environments given construction and architecture are traditionally male-dominated fields

FEWER NETWORKS
• Lack of relatable role models to nurture entrepreneurs’ confidence
• Few female networks for financial and management advice

Source: Dalberg analysis, PAG-LAW
INVESTORS
Impact investment has grown in the region, however investments in shelter and adjected sectors are scarce

Key trends

• **From 2014-15 to 2016-17**, there was a **64% increase in the number of deals** and an **8% increase in the amount of impact capital invested** (from $1,334 to $1,443 USD MM), according to the Association for Private Capital Investment in LATAM (LAVCA)

• **More and bigger funds** are emerging such as Blue Like an Orange’s $100 MM USD fund in Ecuador, and Semplis’ $5.7 MM USD fund in Colombia

• In particular, **Latin America-based investors more than doubled their investments** from $95 MM USD over 2014-15 to $193 MM USD in 2016-17

• In the Andean Region, **Peru and Ecuador are the countries where most impact investing capital has been deployed in the last 5 years**

• Investments in microfinance still dominate with **54% of the total capital deployed in Latin America**, while **the shelter sectors** capture only **3% of the total invested**

Sources: LAVCA, GIIN
Investors continue to face key challenges in finding the right pipeline with the appropriate risk/return level

Key challenges for investors

- **Mismatch in investor’s expectations** vs. the region’s early stage entrepreneurship market:
  - Need for financial track record
  - Early vs. growth stage (49% of investments are made in growth stages)
  - Most investors expect returns over 10%
  - Most deals are over $250K USD
- **Limited exit options** due to less developed financial markets and lower growth projections
- **Lack of sophistication in impact measurement methodologies** and processes and common understanding of the impact investing market
- **Fragmented ecosystem demands investors to establish a broad network of relationships** and partnerships with impact organizations to develop a robust pipeline
- **Low availability of capital for** the Andean region across the risk/return spectrum

Source: LAVCA, GIIN, Dalberg analysis
## Investors in the region that self-identify as investing in affordable housing or water and sanitation

<table>
<thead>
<tr>
<th>Investor Name</th>
<th>Description</th>
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<tbody>
<tr>
<td>Acumen</td>
<td>Non-profit global venture fund that uses entrepreneurial approaches to solve the problems of global poverty.</td>
</tr>
<tr>
<td>AlphaMundi</td>
<td>Swiss impact investment advisory firm with a dual mission to reduce poverty and preserve the environment.</td>
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<tr>
<td>Asha Impact</td>
<td>Forges collaboration between impact investing, philanthropy and policy-making in India.</td>
</tr>
<tr>
<td>Ashburton Investments</td>
<td>FirstRand Group’s investment manager. Leading new generation provider of innovative financial solutions.</td>
</tr>
<tr>
<td>Blue Haven Initiative</td>
<td>Family office dedicated to Impact Investing. Current investments include solar power and housing.</td>
</tr>
<tr>
<td>EcoEnterprises Fund</td>
<td>Dynamic investment manager with a track record of 20 years in the field, launched its third fund in May 2018.</td>
</tr>
<tr>
<td>Global Partners</td>
<td>Nonprofit impact investor in sustainable solutions that help impoverished people improve their lives.</td>
</tr>
<tr>
<td>Globalislocal</td>
<td>Collaborative of individuals and foundations investing philanthropic capital in solutions to poverty.</td>
</tr>
<tr>
<td>GroFin</td>
<td>Development financier supporting SGBs across Africa and the Middle East.</td>
</tr>
<tr>
<td>Insitor Impact Asia Fund Pte. Ltd.</td>
<td>Impact investment firm with operational headquarters in Phnom Penh and offices in New Delhi and Yangon.</td>
</tr>
<tr>
<td>Inversor</td>
<td>Impact Investing Fund investing in enterprise-based solutions to Colombia’s most pressing needs.</td>
</tr>
<tr>
<td>Investisseurs &amp; Partenaires</td>
<td>Family of investment funds looking to promote the development of African SMEs.</td>
</tr>
<tr>
<td>Kiva</td>
<td>Website that connects lenders to borrowers from across the world.</td>
</tr>
<tr>
<td>NESsT</td>
<td>Develops sustainable social enterprises that solve critical social problems in emerging market countries.</td>
</tr>
<tr>
<td>Novastar Ventures</td>
<td>Venture catalyst firm assisting entrepreneurs with innovative business models to serve East and West Africa.</td>
</tr>
<tr>
<td>One to Watch Nepal Pvt. Ltd.</td>
<td>Investment manager based in Nepal. Supports SMEs focused on basic needs - food, infrastructure and health.</td>
</tr>
<tr>
<td>Overseas Development Africa</td>
<td>Asset manager in West Africa, supporting SGBs in the agriculture and WASH sectors.</td>
</tr>
<tr>
<td>Pomona Impact</td>
<td>Angel investment group that targets early-stage impact businesses in LATAM.</td>
</tr>
<tr>
<td>Rianta Capital, Artha Initiative</td>
<td>Strives to support high impact sustainable enterprises providing goods and services to BOP in India.</td>
</tr>
<tr>
<td>Shared Interest</td>
<td>Mobilizes the resources for Southern Africa’s economically disadvantaged communities to sustain themselves.</td>
</tr>
<tr>
<td>Trillium Asset Management</td>
<td>Integrates Environmental, Social, and Governance (ESG) factors into the investment process.</td>
</tr>
<tr>
<td>Triple Jump</td>
<td>Serving as a bridge between developed capital markets in the West and financial sectors in developing countries.</td>
</tr>
<tr>
<td>Villgro Innovations Foundation</td>
<td>Aims to impact rural enterprises, users and wealth creation in India. Provide interest-free loans (USD $53K).</td>
</tr>
<tr>
<td>Vox Capital</td>
<td>Brazil’s first impact investing venture capital fund. It invests in SGBs which serve the Brazilian BOP.</td>
</tr>
<tr>
<td>Wangara Green Ventures</td>
<td>Impact investment firm currently launching a climate focused fund in Ghana. Evergreen fund of USD10 million.</td>
</tr>
<tr>
<td>Yunus Social Business</td>
<td>Supporting the establishment of social businesses worldwide focused on vulnerable communities.</td>
</tr>
</tbody>
</table>

Source: ANDE
CAPACITY DEVELOPERS
Large number of acceleration and incubation programs with mixed results

Capacity building programs are widespread in the Andean region

Main capacity building programs in the Andean Region

- **Impaqto**
- **ConQuito**
- **AEI**
- **Endeavor**
- **Pontificia Universidad Católica**
- **Emprende UP**
- **Investa**
- **Start-Up Chile**
- **Masisa Lab**
- **Socialab**
- **Agora**
- **Centro de Innovación UC**
- **INNPulsa**
- **Socialab**
- **Wayra**
- **Fundación Bolívar Davivienda**
- **BDP Lab**
- **Innova Santa Cruz**
- **Novus**
- **Inicia**
- **Mayma**
- **Njambre**
- **Socialab**
- **DRIMCOM**

However offered services are not fully addressing entrepreneurs’ most urgent needs

<table>
<thead>
<tr>
<th>Key Services</th>
<th>Prevalence in the region</th>
<th>Value to startups</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coworking space</strong></td>
<td>![Prevalence Icon]</td>
<td>![Value Icon]</td>
<td>- Entrepreneurs in less developed ecosystems find this service valuable to start building personal networks&lt;br&gt;- Scarce service in the shelter sector</td>
</tr>
<tr>
<td><strong>Peer Network</strong></td>
<td>![Prevalence Icon]</td>
<td>![Value Icon]</td>
<td>- Highly valuable as networks with other startups and investors may unlock new markets for entrepreneurs</td>
</tr>
<tr>
<td><strong>Mentoring</strong></td>
<td>![Prevalence Icon]</td>
<td>![Value Icon]</td>
<td>- Most valuable when mentors are industry-specific and do regular check-ins with entrepreneurs</td>
</tr>
<tr>
<td><strong>Training / classes</strong></td>
<td>![Prevalence Icon]</td>
<td>![Value Icon]</td>
<td>- Most programs offer trainings; however, these tend to cover general topics which are not relevant for entrepreneurs in more mature stages</td>
</tr>
<tr>
<td><strong>Access to investors / direct financing</strong></td>
<td>![Prevalence Icon]</td>
<td>![Value Icon]</td>
<td>- Most programs cater to early-stage entrepreneurs but lack networks of pre-seed capital investors&lt;br&gt;- Risk of misaligned incentives to enter programs just for access to capital</td>
</tr>
</tbody>
</table>

Source: Dalberg analysis
While capacity developing programs are the center of the ecosystem, they still have several funding and network challenges

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Trends</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Offering</td>
<td>• Most programs are focused on offering master classes, generic mentoring and peer networks</td>
<td>• Limited access to high-quality mentors with social entrepreneurship experience as well as technical expertise</td>
</tr>
<tr>
<td>Entrepreneurs’ characteristics</td>
<td>• Few social entrepreneurs, focus is on startups with rapid growth potential &lt;br&gt; • Opportunity to improve business plans to include revenue generating mechanisms &lt;br&gt; • Increasing female presence as founders of startups</td>
<td>• Most programs require a certain level of business knowledge thus excluding entrepreneurs from lower socioeconomic sectors &lt;br&gt; • Diminishing returns as entrepreneurs participate in multiple accelerator programs</td>
</tr>
<tr>
<td>Partnerships</td>
<td>• Most Andean governments are creating programs and investment funds to support startups and capacity building programs &lt;br&gt; • Private sector networks, foundations, and academia are also leading efforts to train entrepreneurs and unite the ecosystem</td>
<td>• Few official and functioning networks to link entrepreneurs with investors &lt;br&gt; • Limited partnerships with impact investors and other ecosystem actors to provide direct access to investment and new markets</td>
</tr>
<tr>
<td>Program Format</td>
<td>• Few industry-specific programs, with few dedicated to the shelter sector (e.g. Masisa Lab) &lt;br&gt; • Most programs are on-site, however they are transitioning to online models due to the COVID-19 health crisis</td>
<td>• Most programs are based in capitals and large cities excluding rural entrepreneurs &lt;br&gt; • Lack of long-term commitment from mentors after program ends</td>
</tr>
<tr>
<td>Funding</td>
<td>• Rely on international grants, government funding and to a lesser extent, fees from entrepreneurs &lt;br&gt; • Largest accelerator programs are Andean chapters of international corporations or part of private corporations &lt;br&gt; • Some accelerators offer consulting services as an additional revenue source</td>
<td>• High dependence on grants, donations and public funds that can only be applied to once, threatening their survival</td>
</tr>
</tbody>
</table>

Source: Dalberg Analysis
The need for long-term mentoring is highly required, but not many capacity developers offer it

Focus cases in mentoring

- **Country**: Colombia.
- **Focus**: Social entrepreneurs.
- **Quantica Education** is a school for the innovative thinking of individuals who want to take action to transform the status quo.
- The programs offered by Quantica are more focused on entrepreneurial development than other programs.
- **Value proposition**: TRANSFORMING EDUCATION: 1) Radical collaboration (intergenerational, interdisciplinary, intercultural); 2) Learn by doing.

- **Country**: Ecuador
- **Focus**: Social Entrepreneurs
- IMPAQTO has a flexible mentoring program, where entrepreneurs have a head mentor but can interact with other mentors who have a specialty in other areas.
- **Value proposition**: Developed a virtual community between mentors, entrepreneurs, and experts.

What are the entrepreneurs looking for?

**Ecuadorian Entrepreneur**

I was in an acceleration program that, when it was over, I had several questions, but I had no one to ask.

**Colombian Entrepreneur**

When there are no informal spaces for interaction with mentors, do not create a link to make inquiries when the program ends.

**Peruvian Entrepreneur**

I would like to have a mentor who is involved in the business, someone who is committed and gives me relevant knowledge.
Contents

1 Regional Overview

2 Implications for Shelter Tech

3 Country summaries

4 Annexes
There is an important opportunity for TCIS to catalyze the shelter entrepreneurship sector in the Andean region.

TCIS could play several roles in support of the shelter ecosystem, such as:

- Capacity Developer
- Convener / Connector
- Funder
- Advocate

The role that TCIS chooses to play will impact the design of the program.

Objective and key goals:
- Entrepreneur Selection
- Services Offered
- Partners and mentors
- Program Format
- Metrics and tracking
## Key Questions

- What should be the core impact of the ShelterTech program in the Andean region?

- How should TCIS prioritize and balance scale, speed to market, degree of innovation or depth of impact in entrepreneurs?

## Considerations and Recommendations

- TCIS and ShelterTech can catalyze the shelter entrepreneurship sector by:
  1. **Raising the profile** of the sector among investors, capacity developers, and potential entrepreneurs
  2. Supporting the **integration of a community of actors** participating in the sector in the region

- Supporting, through **capacity and funding**, a select set of entrepreneurs reach scale, or support a (potentially larger) number of earlier stage ventures reach proof of concept

- Incorporating the first two potential roles into ShelterTech objectives can create a longer lasting and wider impact on the sector and better position HfH to be a key player in the future.

- Prioritizing **innovation and potential for scale** vs. supporting less entrepreneurs will help TCIS highlight the investment case and opportunity in the sector

- Define priority countries to facilitate **alignment** of ShelterTech program with the **state of the social entrepreneurship ecosystem**
  - Markets like Colombia and Chile are better able to drive innovation if adequately supported while in other countries, entrepreneurs look for support to reach financial sustainability

- Very few entrepreneurs can sustainably provide services for the most vulnerable (and achieve depth of impact), given higher cost to serve, and this is usually covered by non-for-profit organizations that rely on grant funding to be sustainable

### Lessons learned from previous ShelterTech Accelerator Programs
## Key Questions

### What shelter sub-sector to prioritize?

- Prioritizing **home improvement sub-sector** is aligned with HfH’s strategy and market conditions
  - Market for water and sanitation and electricity are smaller in the region
  - New construction presents challenges due to large government role, scale requirements and traditional consumer preferences
- Monitor and start engagement with **PropTech sector** companies with potential to expand to the shelter sector

### How many countries should the program include?

- Defining **2-3 priority countries** will enable ShelterTech to provide more targeted support to entrepreneurs, it will facilitate identifying and establishing the right networks and partnerships and can drive the creation of a stronger/deeper ecosystem in those countries
- While concentrating resources and efforts in priority countries, program should consider not excluding entrepreneurs from the rest of the region that closely align to the objectives and scope
- Entrepreneurs do find value in **regional programs and networks**, in particular, given the ambition for expansion beyond their home country

### What stage of development?

- While gaps exist in coverage and quality, the region has a more extensive presence of incubator programs. A **sector specific accelerator**, of enterprises with a proven model could be more catalytic and better support the broader objectives

### How to identify the right entrepreneurs?

- **Broad local networks** are key to promote the program and identify relevant entrepreneurs, build relationships with universities, chambers of commerce, industry associations and the entrepreneurship sector
- Allow enough time to promote the program in target cities and networks
- Consider hosting targeted events prior to the program to engage the ecosystem
<table>
<thead>
<tr>
<th>Key Questions</th>
<th>Considerations and Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• What is the right package of services to offer?</td>
<td>• The value proposition of acceleration programs vary widely based on the stage of development and maturity of the entrepreneurs. It is frequent for entrepreneurs to participate in multiple programs over their growth journey and therefore cover the same topics multiple times. <strong>Highly targeted programs deliver the most value</strong></td>
</tr>
</tbody>
</table>
| • What topics are most relevant to entrepreneurs?                            | • **Services highlighted as most valuable include:**  
  • Need based programing, development plans tailored to the specific needs of entrepreneurs. Technical knowledge provided needs to address the real and specific challenges facing an entrepreneur at a specific moment in time  
  • Conduct need assessment to understand where entrepreneur needs help and consider segmenting entrepreneurs into targeted program plans. Dedicated and personalized business mentoring (more on the next page)  
  • Access to market through connection to potential distribution channels or sector specific partners  
  • Peer to peer networking so that entrepreneurs can get help, advice, and/or business connections from other participants who have expertise or are facing similar challenges. This component could be launched before the program starts (going beyond the selected entrepreneurs) to drive the integrating of the ecosystem and should be given enough time during the program itself  

| Topics that were reported as having higher value include:                    | • **Topics that were reported as having higher value include:**  
  • Investment structures  
  • Legal and accounting counseling  
  • Deep market research techniques to improve understanding of consumers housing preferences and barriers to change  
  • Digital skills to expand digital business models (particularly relevant in the COVID-19 context)  

| ShelterTech Andean Program – Services Offered                               |  

---
Key Questions

• What type of partnerships can support the success of the program?

• How to identify and engage the right mentors?

Considerations and Recommendations

• Given its regional reach and the maturity of the shelter sector, the program would benefit from a **wide range of partnerships and collaboration** to support its success:

• **Public sector agencies** such as ministries of production and innovation agencies can support promotion of the program as well as enable ShelterTech to leverage existing channels for support and funding (e.g. Production Ministry in Argentina*)

• **Universities** can also be good partners for entrepreneur recruiting as well as to identify local sector specific experts (e.g. Pontificia Universidad Católica del Perú*)

• **Industry associations** such as chambers of commerce are key to identify stakeholders that could act as mentors as well as facilitate access to market for entrepreneurs in the program (e.g. The Chilean Chamber of the Construction Industry *)

• **Ecosystem builders** such as ANDE, TECHO and Empresa B can help foster ecosystem and connect with potential investors

• To **maximize the impact of mentorship**, ShelterTech should consider:
  • Provide social entrepreneurship training to mentors before the program starts to create a common basis of knowledge
  • Include mentors with a mix of regional, country and industry-specific expertise
  • Plan for long term commitment and mentor engagement (years rather than weeks or months)
  • Strategically match mentors with entrepreneurs based on specific needs and expertise alignment
  • Enable ad-hoc access to the broader mentor group
  • Engage with female entrepreneurs that could serve as mentors

* Key partners are in the country summaries
## ShelterTech Andean Program – Program Format

### Key Questions
- How to structure the program components?
- What are incentives for entrepreneurs?
- How to balance online vs on-site components?

### Considerations and Recommendations
- Entrepreneurs report that a **“learning-by-doing”** approach is most beneficial where entrepreneurs have enough time to apply learnings to their business. Long term support (1-3 years) is seen as one of the most valuable aspects of an accelerator program.

![Tip icon]

While there is significant benefit in in-person engagement, given COVID-19 limitations, capacity developers are creating innovative ways to facilitate engagement. Program should not assume that offline content can be directly translated to online without an impact on quality and experience. Program should leverage **new tools and formats to support remote facilitation** and support the trust building objectives.

- Create space for **building and maintaining trust** among entrepreneurs and with the accelerator and TCIS team.

- Capacity developers report that charging a **small fee to entrepreneurs** has a significant impact in the level of commitment to the program. Entrepreneurs willingness to pay for the program is driven by the level of trust in the institution and the local team, this should be considered before the program start and during promotion and recruiting efforts.
### Key Questions

• How to measure program success?

<table>
<thead>
<tr>
<th>Considerations and Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Throughout the program, create <strong>channels and mechanisms for continuous feedback</strong> and monitoring, such as collecting feedback after every activity</td>
</tr>
<tr>
<td>• Consider engaging a third party to assess overall performance</td>
</tr>
<tr>
<td>• Establish a <strong>performance monitoring mechanisms</strong> to measure revenue, profit, employment and investment received (if any) and secure commitment from entrepreneurs to provide data over a multi-year period. Maintaining mentorship support and an active network will facilitate building long term relationship with the entrepreneurs and the sector</td>
</tr>
<tr>
<td>• Assess partners contributions and engagement with entrepreneurs for future programs</td>
</tr>
</tbody>
</table>
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Argentina Overview

Key Trends

Supportive government amid economic crisis:
- In 2017, the Government launched the Entrepreneurs Law, which included funds to support capacity developers and entrepreneurs, improving the integration of networks and secondary cities.
- The inflation and variation of the dollar has caused the threatening private sector’s solvency, consumption and investment climates.

Growing entrepreneurship ecosystem:
- Expanding presence of capacity developers, over indexing on incubators over accelerators.
- Law to provide legal identity to triple impact companies is under debate since 2018.

Impact Investment:
- USD $66 M impact investments in 20 deals in 2016-17.

Ecosystem challenges:
- Macroeconomic instability: High inflation and USD volatility limits the purchasing power of the shelter market, increases prices of imports and increases the risk of USD financing.
- Limited understanding and promotion of impact entrepreneurship: some investors do not have full understanding about the operation of companies with impact, so they do not support them. Furthermore, there is no critical mass of capacity developers focused on impact ventures.
- Harder case for impact for investors vs. other markets: Investors looking to maximize impact on vulnerable populations do not find enough opportunities for impact in the shelter sector.

Potential Opportunities for TCIS

Fundraising: The Government has special funds to promote accelerators and entrepreneurial ecosystems in cities. Fund support of up to ~ USD $ 2.5M per fund (for three funds); seed fund up to ~ USD $ 2k per venture.

Market: Opportunity for solutions to resolve the qualitative deficit (26.4%).

Shelter Entrepreneurs:

Key partners: Njabre, DRIMCOM and Socialab.
- Ministry of Production: the most important public sector actor in the ecosystem that can support to connect with networks and investors.
- Ministry of the Interior, Public Works, and Housing: important to connect entrepreneurs with the public sector market such as public housing programs and private-public associations, where entrepreneurs can participate in estate projects in the affordable housing sector.
Bolivia Overview

Key Trends

Government bureaucracy represents a big barrier:
- In 2019, the government launched its first startup support program “BDP Lab”
- There is limited financial support for startups in the initial stage. Thus, the only single public fund for entrepreneurs "Seed Capital Fund" has specific requirements
- Legal and tax aspects and bureaucratic processes to create a company discourage entrepreneurs

Entrepreneurship ecosystem is emerging:
- Private initiatives fostering ecosystem growth such as Bolivia Emprende and the Bolivian Social Entrepreneurs Network (CESBO) are strengthening

Growing impact investment:
- USD $40 M impact investments in 2016-17 (62% growth vs. 2014-2015)

Ecosystem challenges

- Limited availability of capacity developing programs - Entrepreneurs have a hard time finding quality support programs that help them connect with national or international investors
- Complex regulatory environment - Excessive regulatory requirements and high costs of formalization causes entrepreneurs to prefer to remain informal
- Engrained consumer preferences in housing - Mismatch between innovative shelter products and services with low income families’ needs and preferences
- Lack of investment-ready pipeline - Few Bolivian companies in the shelter sector comply with investors’ profitability and scale criteria to be able to absorb large investments. Also, there is no clarity in the concept of social entrepreneurship

Potential Opportunities for TCIS

Fundraising: New Bolivian funds are betting on impact investment (e.g. SC Angeles). Also, BDP have funds to help entrepreneurs

Market: Bolivia is a global micro-credit pioneer market, therefore, linking to financing solutions for housing might be attractive. Large gap in lack of sanitation (39.9%), neighborhood informality (49.5%), and qualitative housing deficit (30%)

Shelter Entrepreneurs

- DICCON
- Mamut
- Banexo

Key partners: Viva Idea-Knowledge and network
- Vice Ministry of Micro and Small Business, might be able to provide additional support to the entrepreneurs in the program
- Networks like CESBO can be of great help for recruiting
- Connecting with investors who have experience in the Bolivian market is key since they understand the ecosystem better than other investors (such as BIM or SC Angeles).
- CAINCO can help find connections with mentors and entrepreneurs
Chile Overview

Key Trends

**Government has energized entrepreneurship:**
- Government is expanding support bringing funds and facilitating processes: CORFO, SERCOTEC, OPEN, and FOGAPE
- High ease of doing business and setting up a company

**Emerging social focus in a strong entrepreneurship ecosystem:**
- International recognition as an entrepreneurial hub due to its availability of startup funding, outstanding educational system, and a strong national entrepreneurial and innovative spirit
- Social entrepreneurship is starting to emerge, with legal recognition under debate

**Impact Investment:**
- USD $9 M impact investments in 2016-17 (vs. USD $1.1 M invested in 2014-15)

Ecosystem challenges

- **Lack of a differentiated legal figure for social enterprise**—causes harder access to traditional sources of capital and credit for social enterprises
- **Shelter market is limited**—entrepreneurs need to be able to expand market reach to other countries to achieve scale
- **Lack of knowledge and impact metrics**—On the one hand, some entrepreneurs do not know metrics for impact, making it difficult to show value to investors. On the other hand, some investors are not aware of impact measurement methodologies, which makes them not interested in investing in social enterprises
- **Developing networks**—the high competitiveness between some accelerators makes cooperation limited

Fundraising: There are 6 main impact fund managers in Chile managing around USD $138.2 M. CORFO provides many funds to the entrepreneurial sector through Startup Chile

Market: Smaller market need for housing solutions than in other countries, however qualitative deficit remains (13.4%)

**Shelter Entrepreneurs**

* - FIS-Ameris, Fen Ventures, Sembrador, Sudamerik, Lumni, and Fundación Chile

Potential Opportunities for TCIS

**Key partners:** Masisa Lab—knowledge in the Shelter Sector
- Government agencies like CORFO and startup Chile can help in the search for funds, contacts and entrepreneurs
- With the help of Startup Chile, TCIS can finance foreign entrepreneurs who are part of the its program
- The 6 impact funds* have excess money so it is important to contact them to get funds for entrepreneurs
- The Chilean Chamber of the Construction Industry and the Construction Technology Center can be an important source of specialist mentors in construction and housing issues
Colombia Overview

Key Trends

Government has big ambitions for entrepreneurship:
• Government is expanding support with a strong focus on innovation: Economía Naranja, SENA, and Bancoldex Programs
• High ease of doing business and setting up a company

Entrepreneurship ecosystem is booming:
• Colombian accelerators / incubators programs are leading in the Andean region. Most successful programs in Colombia are backed by corporations (e.g. Telefónica, Grupo Bolívar)
• The law of benefit and collective interest companies (BIC) was approved in 2018

Impact Investment:
• USD $86 M impact investments in 2016-17 (162% growth vs. 2014-2015)

Potential Opportunities for TCIS

Fundraising: Several investment funds to support ventures through the Government or the private sector (e.g. Fondo Emprender and Emprende País)

Market: Key opportunity in home ownership issues for entrepreneurs, due to low rate of secure tenure (48%)

Shelter Entrepreneurs

Ecosystem challenges

• Lack of consumer trust in new products/services - The affordable housing market has faced scams making it difficult for entrepreneurs to offer solutions
• Complex regulatory environment for shelter products - Unfavorable credit regulations (e.g. banks don’t offer credits for prefabricated houses) and high regulatory requirements to operate in construction sector elevate costs for small enterprises
• Limited investment-ready pipeline - Most social companies are early-stage and struggle for capital. Engineers and architects leading shelter startups often lack the administrative / business skills
• Lack of long-term support - Few accelerator programs follow-up with entrepreneurs to check on progress

Key partners: Chambers of Commerce in main cities (Medellín, Bogotá and Cali), Ruta N and ANDI can help find connections with mentors and entrepreneurs
• SENA, and Fundación Bolivar-Davivienda can help find funds and entrepreneurs
• Compensation funds can partner with the private sector to execute social housing projects (e.g. Comfandi)
• Opportunity to collaborate with foundations working to solve housing crisis of displaced populations by the FARC conflict
Ecuador Overview

Key Trends

Government creating space for entrepreneurship:
- Quito’s entrepreneurial ecosystem is growing due to the efforts of ConQuito and AEI, developing more robust networks and technical assistance workshops for entrepreneurs
- On January 2020, the Entrepreneurship and Innovation Law (LEI) was launched, focused on improving access to finance for entrepreneurs

Emerging entrepreneurship ecosystem:
- Ecuador has had one of the highest Total Entrepreneurial Activity (TEA) rate in Latin America
- There is an instruction that allows companies to establish or adapt as a BIC (there is no law)

Impact Investment:
- USD $185 M impact investments in 2016-17 (vs. USD $199.6 M invested in 2014-2015), high share of MFI

Ecosystem challenges

- Limited entrepreneurship and management skills in the shelter sector: There is a weak integration of the academy in the ecosystem, which is why many entrepreneurs have gaps in administrative knowledge
- Scale limitations due to small market potential: with only 17 MM people, Ecuador presents brings further need to invest in startups with potential for international expansion
- High local taxes for foreign investors: tax regulations increase the cost of doing business in Ecuador. Non-resident investors are due to pay 25% of any profits obtained

Fundraising: Capital supports are growing. Through SENCYTEC it is possible to obtain seed capital. There are also international funds that already know the Ecuadorian market as POMONA

Market: The most prominent opportunities to undertake are in solving the qualitative deficit (36%), followed by the quantitative housing deficit (15%)

Potential Opportunities for TCIS

Key partners:
- AEI can be key to contact entrepreneurs with potential partners in the private sector or with investors
- IMPAQTO and CERES can help as a partner to provide advice and contact entrepreneurs
- CAMICON can be a source for specialist construction mentors
- SENCYTEC and CONQUITO could help with funds to entrepreneurs in the program
Peru Overview

Key Trends

Government fostering a culture of innovation:
- Developing programs to support entrepreneurs such as Startup Peru and Emprendedor Peruano
- The Law No. 30220 established every university must set up an incubation program. Today 80% of incubators are housed within universities
- Increasing funds for entrepreneurs through COFIDE and the Ministry of Production

Strong networks in the entrepreneurship ecosystem:
- The ecosystem is growing thanks to networks like PECAP and ASEP
- The law of benefit societies and collective interest (BIC) is still under debate

Impact Investment:
- USD $86 M impact investments in 2016-17 (162% growth vs. 2014-2015)

Potential Opportunities for TCIS

Fundraising: The government supports incubators with funds so that entrepreneurs receive capital. Furthermore, COFIDE plays an essential role in raising funds

Market: The most transcendent opportunity to undertake this is to provide solutions to the health deficit (74.3%), followed by the informality of the neighborhoods (34%)

Ecosystem challenges

- **Generic programs** – Lack of specialized advice as most Peruvian programs offer seminar-based assistance to all types of entrepreneurs
- **Lack of interaction with other ecosystem actors** – Despite the existence of networks, no agent unifies and connects all the actors in the ecosystem. Besides, there are no networks focused on the impact sector
- **Mismatch return expectations** – expectations of rapid scale and high returns do not correspond to the reality of Peruvian startups
- **Government participation limits private sector role** - Low incentives to invest in home improvement from potential clients due to government’ pledges to launch public housing programs

Key partners:

- By connecting with the main university incubators*, projects can be obtained in more advanced stages and with teams with broader business knowledge
- It is important to have contact with the production ministry or Innóvate Perú to access key contacts and funds
- Networks like PECAP and ASEP are fundamental to getting contacts and entrepreneurs. They can help in promoting the program

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* - Pontificia Universidad Católica del Perú, BioIncuba, Emprende UP, USIL Ventures
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## A. Summary of key housing and entrepreneurship indicators

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<th>Definition</th>
<th>LATAM Average</th>
<th>AR</th>
<th>BO</th>
<th>CH</th>
<th>CO</th>
<th>EC</th>
<th>PE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HDI</strong></td>
<td>Measure of average achievement in three dimensions of human development: life length and quality, knowledge, and standard of living (0 to 1 scale where 1 is best)</td>
<td>0.74</td>
<td>0.83</td>
<td>0.7</td>
<td>0.85</td>
<td>0.76</td>
<td>0.76</td>
<td>0.76</td>
</tr>
<tr>
<td><strong>Female employment to population ratio, 15+, modeled</strong></td>
<td>Female employment to population ratio is the female proportion of a country’s population that is employed. Employment is defined as persons of working age who, during a short reference period, were engaged in any activity to produce goods or provide services</td>
<td>48.65%</td>
<td>45.2%</td>
<td>60.8%</td>
<td>47.8%</td>
<td>50.1%</td>
<td>52.5%</td>
<td>67.9%</td>
</tr>
<tr>
<td><strong>Qual. Housing Deficit</strong></td>
<td>Measures the key deficiencies in housing quality across material, habitable space, and basic services metrics (weighted average as percentage)</td>
<td>33.8%</td>
<td>26.4%</td>
<td>30%</td>
<td>13.4%</td>
<td>26.8%</td>
<td>36%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Quant. Housing Deficit</strong></td>
<td>Measures the gap in necessary housing to cover the needs of households that do not have housing (weighted average as percentage)</td>
<td>25%</td>
<td>12.3%</td>
<td>N/A</td>
<td>6.4%</td>
<td>9.80%</td>
<td>15.1%</td>
<td>1.8%</td>
</tr>
<tr>
<td><strong>Ease of Doing Business Score</strong></td>
<td>The ease of doing business score helps assess the absolute level of regulatory performance over time. It captures the gap of each economy from the best regulatory performance observed on each of the indicators across all economies in the Doing Business sample. An economy’s ease of doing business score is reflected on a scale from 0 to 100, where 0 represents the lowest and 100 represents the best performance</td>
<td>60.9</td>
<td>58.9</td>
<td>51.6</td>
<td>72.6</td>
<td>70.1</td>
<td>57.7</td>
<td>68.7</td>
</tr>
<tr>
<td><strong>Entrepreneurial Culture</strong></td>
<td>Measures attitudes towards entrepreneurial risk, authority delegation, growth of innovative companies, and the embracing of disruptive ideas (0 to 100 scale where 100 is best)</td>
<td>47.7</td>
<td>49.3</td>
<td>38.6</td>
<td>52.7</td>
<td>49.1</td>
<td>44</td>
<td>46</td>
</tr>
<tr>
<td><strong>Financing to SMEs</strong></td>
<td>Benchmarks the level of financing which SMEs can acquire from the economy (1-7 scale where 7 is best)</td>
<td>3.7</td>
<td>2.6</td>
<td>4.1</td>
<td>4.1</td>
<td>3.9</td>
<td>3.7</td>
<td>3.6</td>
</tr>
<tr>
<td><strong>VC Availability</strong></td>
<td>Benchmarks the amount of VC funding compared to international measures (1-7 scale where 7 is best)</td>
<td>2.9</td>
<td>2.3</td>
<td>2.6</td>
<td>3.8</td>
<td>3.2</td>
<td>2.7</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Sources: OECD, UNDP, IDB, World Bank, World Economic Forum, El Tiempo, Ecuadorian Housing Ministry, INEI, INE, Study Center: Liberty and development, María Camila Rodríguez in Voces en el Fenix, IDB, CENDOC, Fundación Vivienda en Chile
## B. List of stakeholders interviewed

<table>
<thead>
<tr>
<th>Country</th>
<th>Actor</th>
<th>Organization</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Argentina</strong></td>
<td>Entrepreneur, Entrepreneur</td>
<td>FOVISEE, Módulo Sanitario</td>
<td>Nicolás Maggio, Matias Nicolini</td>
</tr>
<tr>
<td><strong>Bolivia</strong></td>
<td>Entrepreneur, Ecosystem builder, Ecosystem builder</td>
<td>DICCON, CAINCO, Viva idea</td>
<td>Camila Maldonado, Claudia Paccieri, Felipe Symmes, Daniela Bolivar, Fernanda Achá</td>
</tr>
<tr>
<td><strong>Chile</strong></td>
<td>Capacity developer, Ecosystem builder</td>
<td>Startup Chile, Inversión de Impacto</td>
<td>Francesca Lasagna, Gonzalo San Martín</td>
</tr>
<tr>
<td><strong>Colombia</strong></td>
<td>Entrepreneur, Capacity developer, Investor, Investor, Ecosystem builder, Expert, Expert</td>
<td>Suyo, Quantica Education, Acumen, Global Partnerships, Comfandi, ETH Wohnforum, Universidad de Los Andes</td>
<td>Matt Alexander, Camila Sarria, Santiago Alvarez, Marcela Falquez, Felipe Montoya, Alejandro Jaramillo, Alejandro Medina</td>
</tr>
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</table>
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<th>Organization</th>
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<tbody>
<tr>
<td>Ecuador</td>
<td>Entrepreneur</td>
<td>Ecuaplastic</td>
<td>Edgar Mora</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Entrepreneur</td>
<td>MiHAoUZ</td>
<td>José Fernando Mena</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Entrepreneur</td>
<td>Yakupura</td>
<td>Carolina Placencia and Danilo Mendoza</td>
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<tr>
<td>Ecuador</td>
<td>Capacity developer</td>
<td>IMPAQTO</td>
<td>Daniela Peralvo</td>
</tr>
<tr>
<td>Peru</td>
<td>Entrepreneur</td>
<td>Ciclo</td>
<td>Roger Mori</td>
</tr>
<tr>
<td>Peru</td>
<td>Entrepreneur</td>
<td>LUTW</td>
<td>Christopher Jensen</td>
</tr>
<tr>
<td>Peru</td>
<td>Entrepreneur</td>
<td>XRunner-venture</td>
<td>Raul Briceño</td>
</tr>
<tr>
<td>Peru</td>
<td>Capacity developer</td>
<td>Investa VB</td>
<td>Luis Salazar</td>
</tr>
<tr>
<td>Peru</td>
<td>Investor</td>
<td>BBCS Peru</td>
<td>Javier Benavides</td>
</tr>
</tbody>
</table>
C. Sources Consulted

- **ACAFI** (2018), *Anuario 2018 -Fondos De Inversión Chile*
- **AEI** (2019), *La industria de capital emprendedor en Ecuador 2018-19*
- **AEI** (2014), *La Estrategia Ecuador un país emprendedor e innovador en el 2020*
- **ARCAP** (2020), *El impacto del Capital Emprendedor como dinamizador de la Economía*
- **Argentine production ministry** (2016), *Todo sobre la Ley de Emprendedores*
- **ASEP** (2019), *Reporte sobre el estado del emprendimiento social y ambiental en el Perú*
- **BIM** (2019), *Investigación Incubadoras en Perú*
- **CENDOC** (2010), *Derecho Humano A La Vivienda En Bolivia Examen Periódico Universal*
- **CIA: The World Fact Book** (2015), % Of population with access to drinking water
- **Di Virgilio y Rodríguez en Voces en el Fénix** (2017), *Los límites del derecho a la ciudad: las encrucijadas del déficit habitacional en la Argentina*
- **ECOTEC** (2017), *El Emprendimiento En Ecuador Visión Y Perspectivas*
- **Ecuadorian Government** (2017), *Panorama Laboral Y Empresarial Del Ecuador*
- **EEB: Figueroa** (2016), *Diagnóstico EcosistemaEmprendedorBoliviano: Fundamentos para la articulación y fortalecimiento de impulsores*
- **FBE** (n.d.), *Capital de Riesgo en Bolivia*
- **FIS Ameris** (2018), *Encuentro Cataliza: Chile 2018*
- **Fundación de vivienda Chile** (2017), *Déficit habitacional cuantitativo: Censo 2017*
- **GEM** (2014-15-16-17-18), *Enomy Profiles*
- **Government of Argentina** (2019), *El Gobierno nacional aprobó el primer proyecto privado para la construcción de viviendas sociales*
C. Sources Consulted

- **Government of Argentina** (n.d.), *Ser emprendedor*
- **IDB** (n.d.), *Urban Development And Housing Sector*
- **IDB** (2019), *Vivienda ¿Qué viene?: de pensar la unidad a construir la ciudad*
- **IDB** (2016), *Study of Social Entrepreneurship and Innovation Ecosystems in the Latin American Pacific Alliance Countries*
- **IDB in Centro Urbano** (2019), *45% de la población en AL habita una vivienda no adecuada*
- **IDRC Digital Library** (2019), *Movimiento legislativo de Sociedades de Beneficio e Interés Colectivo (B.I.C.) en América Latina: análisis, desafíos y propuestas para su avance*
- **INE en Habitat for Humanity** (2018), *The housing need in Bolivia*
- **INEI** (2017), *XIII. Déficit habitacional*
- **Inversión de Impacto** (2016), *Aceleradoras Para Emprendimiento Social: Modelos De Aceleración Y Ecosistemas De Apoyo En América Latina Y El Caribe*
- **Inversión de Impacto** (2017), *Inversión de Impacto en Argentina 2017: Oportunidades y desafíos*
- **LAVCA** (2019), *Latin American Startup Directory*
- **LAVCA** (2018), *2018 Industry Data & Analysis of the Latin American Private Equity & Venture Capital*
- **LAVCA** (2018), *Impact Breakout Report*
- **LAVCA** (2018), *The Impact Investing Landscape In Latin America: TRENDS 2016 & 2017*
- **LAVCA** (2016), *The Impact Investing Landscape In Latin America: TRENDS 2014 & 2015*
- **Libertad y Desarrollo** (2017), *Déficit habitacional en Chile: desafíos de política pública*
- **Ministry of education of Peru** (2014), *Ley Universitaria N°30220*
- **Ministry of Habitat and Housing of Ecuador** (2015), *Programa Nacional de vivienda social*
- **Omidyar** (n.d.), *Segmenting Enterprises to Better Understand Their Financial needs*
- **PECAP** (2018), *Estudio Costos Legales*
- **PECAP** (2018), *Mapeo de Corporate Venture*
- **PECAP** (2019), *Reporte de Capital Emprendedor*
C. Sources Consulted

- **Pilar Chamber of Small and Medium Enterprises** (2016), *Programas de la Secretaría de Emprendedores y de la PyME*
- **SDG Country Profiles – UN** (2016-2017), *The proportion of the urban population living in slums*
- **Sistema B** (2018), *Ley de Sociedades de Beneficio e Interés Colectivo (BIC)*
- **The Aspen Institute** (2014), *Formas de trabajo de fondos de inversión de impacto en Latinoamérica*
- **Thomson Reuters Foundation** (n.d.), *Derecho a una vivienda digna en Latinoamérica: Análisis normativo y jurisprudencial*
- **UNDP** (2018-19), *Population living below income poverty line, national poverty line (%) / HDI*
- **UN HABITAT** (2011), *Affordable land and housing in Latin America and the Caribbean*
- **University of Oxford** (2017), *PropTech 3.0: The future of real estate*
- **WIPO** (2019), *Global Innovation Index 2019*
- **World Bank** (2017), *Housing in Latin America and the Caribbean (LAC)*
- **World Bank** (2018), *GINI index*
- **World Bank** (2018), *GDP per capita*
- **World Bank** (2017), *Access to electricity*
- **World Bank** (2019), *Total tax and contribution rate (% of profit)*
- **World Bank** (2018), *Domestic credit to private sector (% of GDP)*
- **World Bank** (2019), *Ease of doing business score*
- **World Bank** (2019), *Employment to population ratio, 15+, female (%) (modeled ILO estimate)*
- **World Bank** (2017), *People using at least basic sanitation services (% of population)*
- **World Economic Forum** (2019), *The Global Competitiveness Report*