



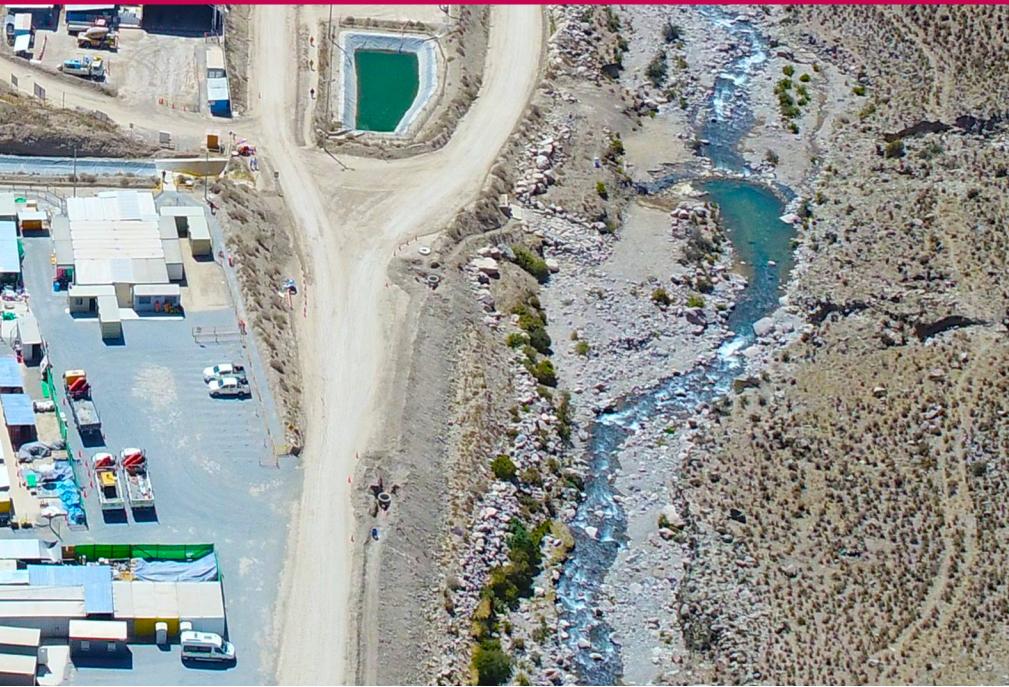
May 2020

BEYOND EXTRACTION:

Economic Opportunities in Mining Communities

Case Study of a Regional Local
Economic Development Program in
Brazil, Chile, and Peru (2016-2020)

Karen Heshusius



Copyright © 2020 Inter-American Development Bank. This work is licensed under a Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives (CC-IGO BY-NC-ND 3.0 IGO) license (<http://creativecommons.org/licenses/by-nc-nd/3.0/igo/legalcode>) and may be reproduced with attribution to the IDB and for any non-commercial purpose. No derivative work is allowed.

Any dispute related to the use of the works of the IDB that cannot be settled amicably shall be submitted to arbitration pursuant to the UNCITRAL rules. The use of the IDB's name for any purpose other than for attribution, and the use of IDB's logo shall be subject to a separate written license agreement between the IDB and the user and is not authorized as part of this CC-IGO license.

Note that link provided above includes additional terms and conditions of the license.

The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent.



(Cover Page) Anglo American's Quellaveco copper project in Peru

(This Page) Elizabeth Argandoña Martel, Emerge Peru staff, and Genoveva Coaila Catacora, Emerge Peru participant





Table of Contents

I.	Executive Summary	5
II.	Context and Communities Overview	7
III.	Local Economic Development (LED) Program	17
IV.	Impact and Results.....	29
V.	Concluding Insights and Lessons Learned.....	39
VI.	Appendix	43
VII.	Acknowledgements	47
VIII.	Endnotes.....	51

Table of Figures

Figure 1.	Program Geographies.....	9
Figure 2.	Program Pillars.....	12
Figure 3.	Pillar Implementation Map: Activities by Pillar	18
Figure 4.	Country-Level Programs.....	20
Figure 5.	CRESWER Workforce Development Approach	24
Figure 6.	Impact Results by Program Pillar and Approach	30
Figure 7.	Country-Level Impact Results	31
Figure 8.	Evolution of Emerge Chile.....	44
Figure 9.	Program Results, as of March 2020	45



Mateus Oliveira, participant in Brazil's CRESER

I. EXECUTIVE SUMMARY

The mining sector is a significant contributor to the economy in Latin Americaⁱ, and its large investments have a direct effect on local socioeconomic and environmental conditions.ⁱⁱ

Through strategic social investments, mining companies have the potential to promote long-term partnerships that enable local communities to benefit directly and indirectly from the mine operations, reducing the possibility of conflict and its many costs.ⁱⁱⁱ

With the vision of validating the hypothesis that mining can be harnessed to create sustainable local economic development, Anglo American, the Inter-American Development Bank (IDB), Inter-American Development Bank Lab (IDB LAB), and the international nonprofit TechnoServe partnered to create Beyond Extraction: Economic Opportunities in Mining Communities (November 2016–March 2020). Beyond Extraction is a \$5 million regional program that seeks to have a direct impact on approximately 2,500 people and to achieve inclusive and sustainable

socioeconomic development in Anglo American's communities of influence in Brazil, Chile, and Peru.

The program's design is based on three core pillars (selected depending on the context in each country): **enterprise development**, **workforce development**, and **value chain development**, which are complemented by two crosscutting approaches: **ecosystem building^{iv}** and **leveraging the mining value chain**. The design combines traditional direct intervention with broader ecosystem strengthening, aiming to build the foundation for long-term sustainability of the program's impact.

Early findings from Beyond Extraction indicate that mining companies' investments may indeed enable sustainable, inclusive local economic growth.^v While the implemented strategy

leverages the presence of Anglo American, it also successfully activates new alternatives for wealth creation independent of the mine. Despite these findings, a main ongoing challenge is ensuring the strength and longevity of partnerships, economic activities, and support services to sustain the impact achieved through the program.

Over its three years of implementation, Beyond Extraction has developed emerging lessons, which are detailed throughout this case study, along with practical tips and stories from the field. The program's insights serve to inform future projects' design and implementation and may be summarized as:

1. Mining companies cannot do it alone.

Creating sustainable local economic development in regions with mining operations involves leveraging mining companies' large investments to create thriving and diversified economies that go beyond extractive-related opportunities. It requires a systemic vision and working with a broader group of key organizations, both public and private.

2. “Long-term” is the mantra for an ecosystem approach.

A strong, functioning ecosystem is fundamental to the sustainability of a program's impact once the program is over. Building or strengthening an ecosystem takes time.

3. Working with the ecosystem requires nimbleness and flexibility.

Mapping key stakeholders and facilitating connections at different levels is a continuous task. Ecosystems are living and continuously changing; a successful program is attuned to these changes and able to adapt with the ecosystem.

4. Focusing on the broader market is key.

In order to avoid creating an overreliance on the mining value chain, an engaged ecosystem must identify existing and potential economic opportunities and work toward capturing diversified markets in the local context.

II. CONTEXT AND COMMUNITIES OVERVIEW

The mining sector is a significant contributor to the economy in Latin America and the Caribbean, representing 17% of the region's total exports in 2017.^{vi}

For Brazil, Chile, and Peru, the mineral and metals industry represented 21, 43, and 44 percent of the countries' exports in 2016^{vii}, while the production value of metallic mineral and coal accounted for 2, 13, and 14 percent of the countries' GDP in 2016.^{viii}

Despite this, regions with mining activities are often characterized by a combination of long-term investments from mining companies, short political cycles, vulnerable and frequently isolated populations, and limited local government capacity and service provision. The influx of large investments from mining companies has a direct impact on the regions (their environment, communities, and economic systems) that has

the potential to generate long-lasting prosperity, but also conflict.^{ix}

Conflict between mining companies and their surrounding communities is often the result of pollution, access to—or competition for—natural resources, and uneven distribution of economic benefits.^x Community members want to understand how to work at the mine or how to sell to the mine, while also remaining attuned to how the mine's presence will affect local environmental and social conditions. However, opportunities for employment and to supply the mine are often limited and fail to reach some populations.^{xi} The existence of prosperous mining operations, absent widely distributed benefits,

affects the relationship between the company and the community, increasing the probability of conflict triggers.

The most frequent effect of conflict^{xii} is lost productivity due to delay; the cost to the sector and national economies can be substantial. For example, a major, world-class mining project with capital expenditure between \$3 billion and \$5 billion will suffer roughly \$20 million of delayed production (in net present value terms) per week.^{xiii} In the countries covered in this case study, for example, a 43-day strike at Minera Escondida (the largest copper mine in the world) in 2017 cost an estimated \$700 million, about 0.9 percent of Chile's 2016 exports;^{xiv} in 2018, the eight-month stoppage of Minas-Rio mine in Brazil cost Anglo American around \$320 million;^{xv} and in 2019, the estimated cost of halted operations at the Las Bambas mine in Peru was \$6.5 million per day.^{xvi} Beyond these costs, there is the lost opportunity to pursue future projects, expansion, or sale.^{xvii} Understanding the magnitude of these costs remains one of the main questions in the sector; once understood, the case for mining companies to build win-win relationships with the communities surrounding their operations

becomes clear.^{xviii} That is, there is a clear incentive for mining companies to support social investments that drive substantial, sustainable, and inclusive socioeconomic development.

Given such an opportunity to harness mining to create sustainable local economic development, Anglo American, the Inter-American Development Bank (IDB) and the international nonprofit TechnoServe have partnered to create "Beyond Extraction: Economic Opportunities in Mining Communities" (November 2016 – early 2020), a regional program aimed at achieving inclusive and sustainable socioeconomic development in the communities of influence of Anglo American in Brazil, Chile, and Peru. The \$5 million program seeks to have a direct impact on approximately 2,500 beneficiaries by leveraging strategic private investment to create value and future opportunities that positively transform mining communities. The objective is to foster diversified economic opportunities—both existing and latent—that are less dependent on mining operations, and as such provide the foundation for sustainable economic prosperity in these communities during and after mining operations. Strengthening public institutions and influencing public policy are also fundamental to help close structural gaps and to ensure the sustainability of the program. For example, well-designed public expenditure of resource revenues can contribute not only to economic well-being, diversification, and growth, but also to social and political stability.^{xix}

The three geographies were selected from Anglo American's areas of operations for both their impact potential and opportunity for learning. This case study draws together the regional experience and reflects the different combinations of beneficiary profiles, local contexts, and project approaches in the three countries. Over three years of implementation, the program has developed emerging lessons on how to leverage mining companies' large investments to create thriving and diversified economies.



Emerge Peru participants Felix Silva Paco and Hilda Arcaya Calizaya

Figure 1. Program Geographies^{xx}

PERU
Project Dates: Jan. 2017-Mar. 2020
Mine Name: Quellaveco (copper and iron-ore)
Mine Lifecycle (at Program Design): End of exploration phase/waiting for construction approval
Area of Influence: Moquegua region
Pop. of Area of Influence: 179,000
Pop. Density: Mostly urban (relatively isolated)
Nearest Cities: Moquegua, 60km; Mariscal Nieto, 40km
Local Economic Development (LED) Opportunity: Build and strengthen entrepreneurship ecosystem; no prior LED program in the area



CHILE
Project Dates: Sept. 2016-Nov. 2019
Mine Names: Los Bronces (copper), El Soldado (copper)
Mine Lifecycle (at Program Design): Operating
Areas of Influence: Colina, Lo Barnechea, Til Til, Lampa (Santiago metropolitan region); Los Andes, San Felipe, Nogales, Calle Larga, San Esteban, Rinconada (Valparaiso region)
Pop. of Area of Influence: 344,000
Pop. Density: Principally urban
Nearest City: Santiago, 65km
Local Economic Development (LED) Opportunities: Strengthen the workforce ecosystem; increase employability for women and youth

BRAZIL
Project Dates: Nov. 2016-Nov. 2019
Mine Name: Minas-Rio (iron)
Mine Lifecycle (at Program Design): Operating
Areas of Influence: Conceição do Mato Dentro, Serro, Dom Joaquim, Alvorada de Minas (State of Minas Gerais)
Pop. of Area of Influence: ~60,000
Pop. Density: Principally rural
Nearest City: Belo Horizonte, 163km
Local Economic Development (LED) Opportunities: Strengthen government capabilities, economic diversification through high potential sectors, and youth empowerment

Harnessing the potential

for mining companies to bring sustainable local economic development through a regional partnership with a shared vision:

THE NATURE OF THE PARTNERSHIP

Beyond Extraction is a tri-partite public-private partnership (PPP) among the IDB, IDB LAB, Anglo American, and TechnoServe. While IDB has extensive PPP experience, it is the first time the Bank has joined a private mining company to co-create and co-fund a program.

“ IDB supports countries in LAC in their efforts to optimize the contribution of the extractive sector to inclusive sustainable development. Aware of the challenges in public-private coordination and in enabling conditions for local economic development, the Bank set out to explore partnering opportunities with private sector partners and local stakeholders to foster new opportunities in the area of influence of large mining investments.”

Martin Walter, Sector Specialist Extractive Sector Initiative, IDB

THE PARTNERS

The three partners connect at various levels (i.e., local, regional, national, and global) and, driven by the shared conviction that there is a case to harness mining activity to create local economic development, each brings expertise to the partnership:

- IDB is the largest source of development funding in Latin America and the Caribbean, and its aim is to achieve development in a sustainable and climate-friendly way. The involvement of the IDB facilitates access to local and national government institutions and supports the use of best practices within the program.
- Anglo American is one of the world's largest mining companies, with operations diversified across products and geographies. The business has committed to create prosperity in the communities it influences. Its participation in Beyond Extraction provides not only investment, but also a reference to engage the participation of other businesses.
- TechnoServe is an international nonprofit that promotes business solutions to poverty. TechnoServe's direct work with participants in multiple mine sites provides data and evidence to drive cross-country learning and adaptation.

PARTNERSHIP APPROACH

The PPP's governance structure—which was underpinned by frequent and transparent sharing of information during the program's implementation, as well as a shared macro vision across the three countries—enabled:

- Quick changes to program design (e.g., reacting to early results / observations, adapting, and innovating);
- Co-ownership of implementation among the local teams of both TechnoServe and Anglo American, ensuring accountability,

alignment, and closer relationships between Anglo American and ecosystem actors;

- Enhanced knowledge management across the three geographies;
- Efficiencies of scale, with one regional partnership taking the place of three different agreements with three operational structures;
- A long-term vision for sustainable development, with awareness of the inherent short-term pressures that a mining company faces in terms of community expectations. The risks associated with changing the path from a focus on interventions highly dependent on the mine's operations to a focus on economic diversification and sustainability was mitigated by having partners from different backgrounds overseeing the intervention;
- A strong foundation for the ecosystem-building approach; each partner facilitated access to different ecosystem actors, driving a systemic approach.

“ It’s not our role to run these programs long-term. I see ourselves as an incubator; we start something and then we need to see a pathway for how it becomes part of the system without requiring constant funding support.”

Maike von Heymann, Socio-Economic Development and Entrepreneurship Manager, Anglo American

TIP:

- Invest up-front in establishing the relationship among partners to ensure there is alignment of objectives and values. This helps ensure successful implementation of the program later on and prevents costly re-directions further down the road.



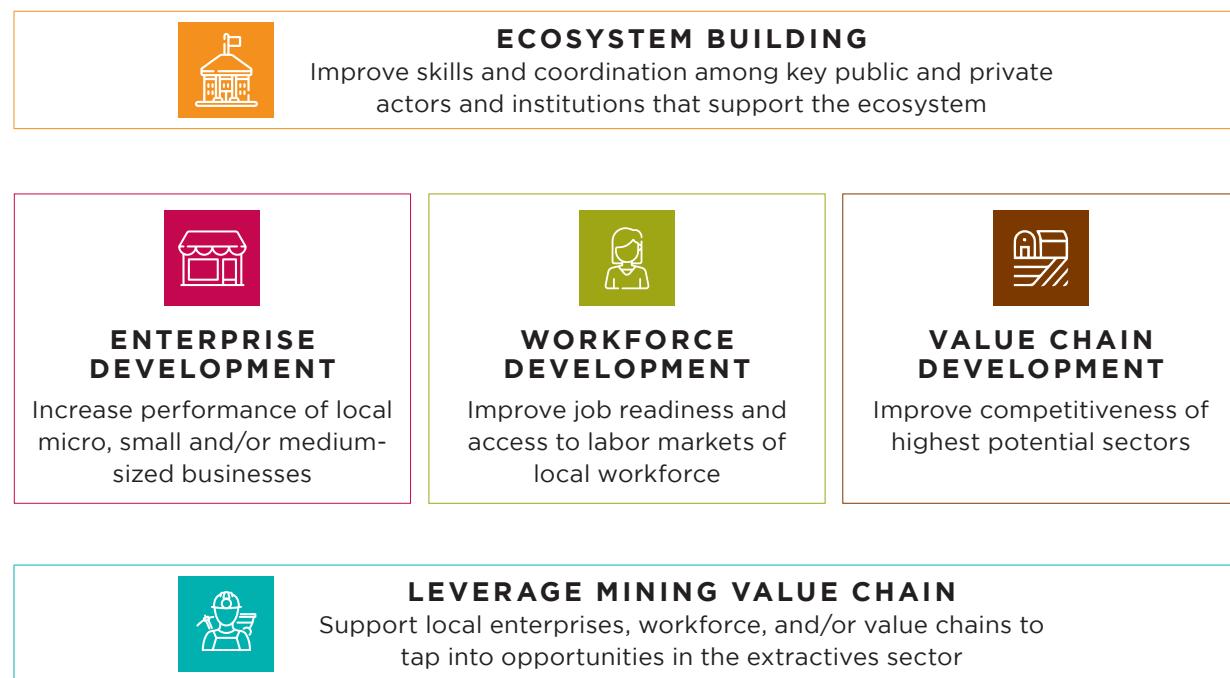
Brazil, Horticulture-Biodiverse system

PROGRAM DESIGN

The program design integrates lessons learned from IDB, IDB LAB, Anglo American, and TechnoServe in the implementation of similar programs and is based on three core pillars: **enterprise development**, **workforce development**, and **value chain development**. The core pillars may be complemented with two crosscutting approaches: **ecosystem building** (i.e., engaging public and private actors, such as government and associations, that have a

direct influence on the sector, market, or issue) and **leveraging the mining value chain** (e.g., community members are supported in linking to the mine as suppliers of services or goods). The key hypothesis is that the inclusive and sustainable development of these communities depends on the whole market system functioning effectively; thus, an ecosystem-building approach was applied across the pillars implemented in each country.

Figure 2. Program Pillars





Emerge Peru participant Jesús Toninho Rodriguez Salazar

In each country, the pillars and crosscutting approaches were selected in accordance with the particular context, the mine's lifecycle, and the pertinence of the specific interventions (i.e., all pillars were not implemented in all contexts).

For example, the Quellaveco mine is located in a mining cluster in a relatively remote area in southern Peru, with latent market prospects outside of mining. The design of the project there began before Anglo American approved the mine construction in July 2018. As such, given the uncertainty of the future of the mine, the enterprise-development pillar was employed to foster opportunities for economic diversification, taking advantage of the proximity to the port of Ilo and city of Arequipa.

Los Bronces and El Soldado, on the other hand, are located relatively close to Santiago—Chile's capital city—with its many market opportunities, and the mines have been in operation for many years. Consequently, the workforce development pillar was employed with a focus on employability beyond the mining sector for women and youth.

Finally, the Minas-Rio mine has been operating since 2014, but unlike Los Bronces, is located in a remote, rural area of the state of Minas Gerais in Brazil. The project in Brazil builds on two pillars: value-chain development focused on opportunities beyond the mining sector (e.g., dairy/cheese, horticulture, beekeeping and tourism) and workforce development, emphasizing personal effectiveness and self-employment opportunities for youth.

The initial market diagnostic underpins the design for the entire program:

Conducting an initial market diagnostic is an important first step in the design of market-based programs. Rather than a “ready recipe” approach, designing the program based on a deep understanding of market opportunities (demand side), the socioeconomic context, and the interconnectedness of the ecosystem (supply side), helps foster a more inclusive, sustainable, and cost-effective approach.

“ The diagnostic proved that at the municipality, all the teams and procedures were disorganized. We had no focus and no priorities to guide our decision-making. It showed us our reality, and that there was a way to improve, so we opened our doors to TechnoServe. They have helped us to create processes, plan and anticipate purchases, and meet key indicators.”

Flávia Magalhães, Secretary of Administration and Human Resources, Municipality of Conceição do Mato Dentro, Brazil

TIP: ECOSYSTEM BUILDING

- Make the diagnostic a participative process. Engage key ecosystem actors (i.e., public- and private-sector actors—like governments and associations—that have a direct influence on the sector, market, or issue) starting from the diagnostic stage so that (1) all voices and sides are taken into account; (2) different perspectives on supply and demand are considered; (3) interventions reflect reality; and (4) ecosystem actors feel a sense of ownership, both of the process and the results.

1

PRIORITIZE PILLARS AND TARGET SEGMENTS

- Use a demand-based approach to prioritize pillars to implement
- Identify the segment(s) of businesses, individuals, or economic sectors you will work with. Will you focus on businesses of a particular size or growth trajectory? Why?

2

DEEP-DIVE ON SELECTED PILLAR(S)

- Conduct a diagnosis on your focus segment(s) to define the market opportunity and understand the key actors in your prioritized segment or sector: Who are the key actors? What do they do? What do they need? Critically, who is ready and willing to engage effectively?

3

ENGAGE ECOSYSTEM

- Share what you learn in the deep-dive with ecosystem actors to build credibility and enable technical conversations. This will enable you to more successfully build the right partnerships and to direct resources towards sectors and actors where you will create greater impact.



Jaime Espinoza, participant in Chile's EmpleaT

III. LOCAL ECONOMIC DEVELOPMENT (LED) PROGRAM

The program seeks to move beyond a traditional direct-intervention approach focused on training and advisory for beneficiaries, and move instead toward an integrated approach that broadens the intervention to engage key public and private stakeholders, such as government, associations, and educational institutions (ecosystem building).^{xxi} The implementation of the program pillars encompasses an initial diagnostic, capacity building (technical and/or professional), access to finance, and access to markets.

TIP: PILOT, THEN SCALE

Pilot with conservative targets for the first cohort of participants, then fine-tune your approach as you scale up your targets in subsequent cohorts.



Sandro Melo, CRESHER Project Facilitator

Figure 3. Pillar Implementation Map: Activities by Pillar



Mateus Oliveira, participant in Brazil's CRESHER

An ecosystem-building approach (i.e., engaging public and private actors such as government and associations that have a direct influence on the sector, market or issue) underpins all pillar activities:



ECOSYSTEM BUILDING

- Analyze the supporting ecosystem (map ecosystem actors), and survey needs and gaps
- Select feasible and impactful intervention points and initiatives (prioritize actors and actions)
- Ensure buy-in from the actors and co-develop the partnership
- Transfer skills (as needed)
- Build linkages and associations (as needed)
- Support sustainability strategies (as needed)

TIPS:

- Work with career employees at public institutions to mitigate the costs of staff turnover and attrition on the partnership team. Create a collective committee with multiple players (e.g., commercial associations, government actors) to increase likelihood of continuity despite natural turnover.
- Make it a collective effort. Public and private stakeholders are key to the program's implementation and future success. The implementing organization should act as a facilitator, not as the leader. Gain trust by sharing a diagnosis based on data and results along the way.
- Bring ecosystem actors to the table by showing them that there is a business case. A diagnostic that provides a clear, compelling business case is very effective.

When the mining value chain is leveraged (e.g., community members are supported in linking to the mine as suppliers of services or goods), the following activities are also carried out:



LEVERAGE MINING VALUE CHAIN

- Identify and prioritize opportunities for local suppliers, workforce or agricultural value chains
- Engage supply chain and procurement teams for action
- Understand local offering gaps
- Recruit local offering
- Build skills, linkages and access to finance

TIP:

Plan and analyze rigorously: consider the mine's purchasing, what can be outsourced, the current status of local suppliers, and how you will bridge the gaps

The Pillars In Practice

Adapting this model to different geographic, political, and socio-economic contexts is challenging, but it is feasible with the right partners and approach. The explanations below demonstrate how each pillar of the Beyond Extraction model has been implemented in local

contexts, highlighting critical lessons for similar future projects. The crosscutting approaches of building the ecosystem and leveraging the mining value chain can be integrated into the implementation of each pillar, and are referenced accordingly throughout.

Figure 4. Country-Level Programs

EMERGE PERU

Support business development and market access

Enterprise Development and Leverage Extractives Value Chain
Develop enterprises that can supply the mine, its contractors and broader markets



Ecosystem
Facilitate the creation of an entrepreneurship ecosystem



EMPLEAT: CHILE

Address unemployment



Workforce Development
Increase employability of women and youth through personal effectiveness development and tools. Create and engage local demand for jobs beyond mining via connections with potential employers, technical schools, etc.



Ecosystem
Strengthen and influence the intermediation system (e.g., municipal labor offices) and facilitate linkages between key actors (companies, Ministries) to improve the match between supply and demand of labor

CRESER: BRAZIL

Addresses unemployment and rural economic opportunities



Workforce Development
Increase employability (employment and self-employment) of youth through personal and professional skills development and tools. Develop connections with potential employers



Value Chain Development
Support dairy/cheese, horticulture, beekeeping, and tourism value chains (including businesses within each)



Ecosystem
Build capacity and strengthen private and public governance (e.g., improve efficiency of decision-making processes) and facilitate linkages between key actors

Enterprise Development: Fostering Local Economic Diversification (PERU)



Emerge Peru adapted the enterprise development methodology from Emerge Chile (see Appendix), a collaboration between Anglo American and TechnoServe operating continuously since 2011 that aims to help entrepreneurs boost their businesses through better access to markets and finance, improved managerial skills, and networking assistance. The methodology selects participants based on attitude and motivation (i.e., interest in learning new tools and growth models), segments them based on sales levels, and differentiates training and advisory solutions accordingly using a mix of workshops, mentorship, e-learning, roadshows, and other services.

Given the uncertainty at the time over whether the Quellaveco project would move forward to construction, Emerge Peru's idea was to invest in developing the local economy in a way that was not contingent upon the possibilities that may come from the influx of a mining investment. During the first one and a half years of the project, the enterprise-development strategy targeted a broad profile of enterprises—in terms of sectors, sizes, and market potential—as well as multiple associations.

“ With the help of Emerge, we participated in the 2019 edition of the national crafts fair ‘De Nuestras Manos’, organized by the Ministry of International Commerce and Tourism MINCETUR in Lima.”

Maritza Peñaloza, Maki Kuna Artisan Association, Program Participant (Entrepreneur)

As of March 2020, 589 enterprises (which represent an estimated 3 percent of the total regional enterprise base) and 12 associations have

gone through the complete project. For larger businesses, the methodology focused on financial management, as well as professionalization in order to meet national procurement standards. For other businesses, the focus was on diagnosing areas blocking business growth, creating plans to address them, and executing the plans.

In addition to direct work with businesses, in November 2018, the Peruvian Ministry of Production, in partnership with Anglo American

TIPS: ENTERPRISE DEVELOPMENT

- Tailor advisory services by segmenting businesses by size and deploying assistance accordingly.
- Select for attitude. The entrepreneur-selection process is critical, and an entrepreneur's attitude is often a better predictor of success than a good business idea.
- Prioritize larger businesses that have the potential to serve as anchor companies and drive growth for smaller enterprises. This approach is efficient and helps to achieve scale by setting the foundation for growth and generating a spillover effect, rather than aiming to cover all enterprises directly.

and the Emerge team, organized two business fairs (in Moquegua and Ilo), where all of the area's entrepreneurship ecosystem actors met for the first time. Emerge Peru found that the entrepreneurial ecosystem in Moquegua was incipient, so these events were constructive because local entrepreneurs had the opportunity to demonstrate to Anglo American's contractors, new investors in the region, and other large companies that there were opportunities to source from local businesses.

After construction of the mine was approved in mid-2018, Emerge Peru revisited the strategy

to improve efficiency and increase impact. The project shifted to a stronger focus on access to markets and a more deliberate selection of enterprises and sectors.

Specifically, the 3rd cycle of the project, which was implemented in 2019, focused on:

- Training larger businesses that have the potential to supply to the mine, its contractors, and other large companies, as well as serve as anchor companies to drive growth for smaller enterprises (rather than having the project work directly with these smaller enterprises)
- Engaging larger companies—both related and unrelated to the mining sector—in alliances to expand local market opportunities for the larger businesses that will be strengthened
- Better selection of participants based on their attitude and eagerness to increase the size of their business
- Prioritizing engagement with associations with high potential for commercial agreements (rather than working with many

organizations, some of which lack a clear market expansion opportunity)

- Developing a strategy to engage the private sector in the entrepreneurship committee, in order to continue building the ecosystem

BASED ON PROGRAM EXPERIENCE, THE ENTERPRISE-DEVELOPMENT PILLAR IS EFFECTIVE WHEN:

There is a plan to diversify markets starting from the design stage

Priority is given to sectors that can provide services through all mining stages (e.g., construction and operations)

Focus is placed on mid-sized businesses that have high potential to access broad market opportunities (not limited to supplying the mining company and/or its contractors) and can serve as anchor firms for smaller local businesses



Emerge Peru participant Grisveli Cristina Torres González

WORKFORCE DEVELOPMENT: FROM IMPROVING PERSONAL SKILLS TO IMPROVING THE LABOR MARKET (BRAZIL AND CHILE)



In many communities in Latin America, women and young people face obstacles to participation in the labor market. In 2016, for example, the youth unemployment rate stood at 19 percent in Minas Gerais, Brazil, compared to a 13-percent overall unemployment rate^{xxii} in the state.^{xxiii} In Chile, meanwhile, the average youth unemployment rate is 17 percent, nearly double the total rate of 9 percent^{xxiv}; and women's participation in the workforce stands at 47 percent, compared to 69 percent for men.^{xxv}

“ I didn't know how to relate to others or to share. Through the course, I realized that if you open up, others also open to you. Now, we have strong bonds, a network, we share job opportunities, and we care for each other. Many conflicts between communities have dissolved. There are many kids in my community waiting to have this same opportunity.”

Davi Silverio Costa, 26 years old

As a response to the higher unemployment rates in these populations, the workforce-development projects in Brazil (CRESWER) and Chile (EmpleaT) focused on increasing employability for youth and women. CRESWER and EmpleaT did not only work directly with participants to grow the supply of employable individuals; the project also engaged businesses and other ecosystem actors, such as municipal labor-mediation offices, private sector employers, and technical schools, in order to build demand and strengthen the linkages between employers and potential employees.



Participants and project staff at a CRESWER youth workshop

However, each country further developed a core component: CRESWER refined a methodology for deep, transformational improvement in personal effectiveness, while EmpleaT built a strategy to improve access to job markets by closing institutional gaps and fixing inefficient connections.

BRAZIL: Overcoming deep emotional and personal barriers to employability

CRESWER built its youth-focused workforce-development pillar on the foundation of TechnoServe's eight-year STRYDE project (a partnership to help rural youth in East Africa transition to economic independence). The Brazil team first conducted a diagnostic (including analysis of primary data on 1,000+ youth, 35 companies, and other ecosystem actors) to gather essential information about local youth, such as their motivation levels and economic situation, as well as market information like current hiring needs and gaps.

In particular, this diagnostic highlighted the fact that youth faced substantial emotional and personal barriers. Thus, a deep-reaching and comprehensive personal effectiveness program was deemed essential for achieving the project's employability goals. CRESWER refined its approach accordingly, applying the following lessons:

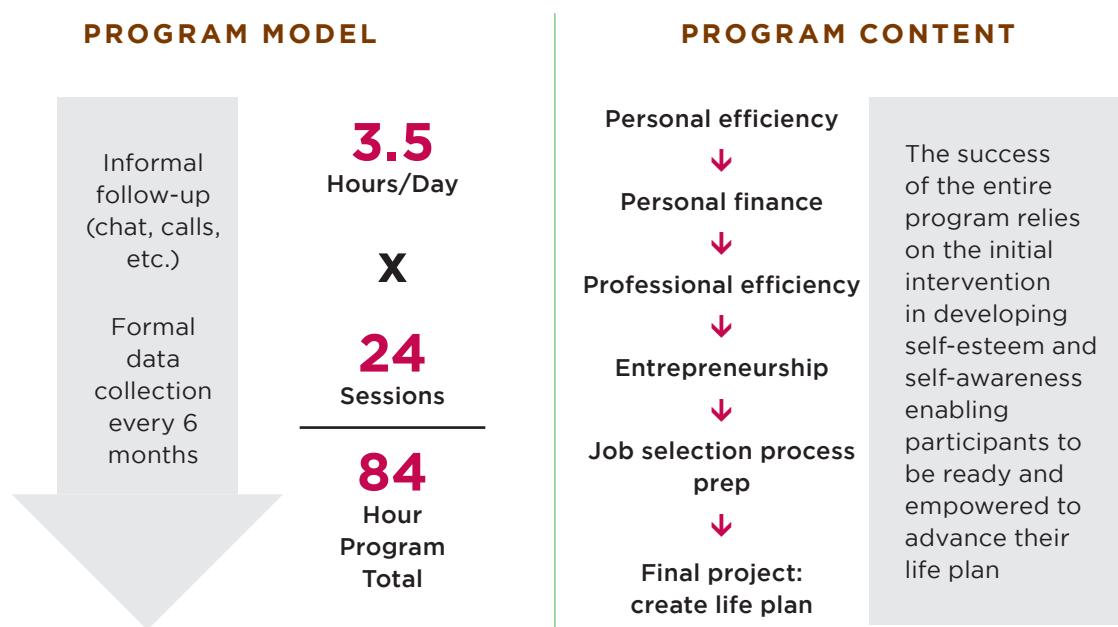
- Facilitators must possess certain skills beyond those “typical” of a business advisor, such as strong business and interpersonal skills. Rather, business advisors must also display empathy; consistent, unwavering, and sensitive attention to everyone in the group; and authenticity. These are skills that can be taught, and all facilitator teams should possess them.
- Focus on experiential learning, based on youth’s everyday life experience
- Facilitate learning through group work, including deep self-reflection and group discussions, rather than lectures
- Facilitator should be flexible and employ a broad toolbox in order to adapt and react to different situations and groups, instead of sticking to a fixed plan

TIP: WORKFORCE DEVELOPMENT

CRESKER Brazil has found that group work can be more powerful than one-on-one mentoring sessions. Working with groups of up to 25 people per facilitator enables significant impact at a larger scale. Participants:

- See they are not alone
- Learn to listen
- Develop empathy
- Learn about teamwork and community work
- Create a strong network
- Learn the power of vulnerability and the ability to control their reactions

Figure 5. CRESKER Workforce Development Approach



CHILE: Adopting an ecosystem approach to address labor market asymmetries

In addition to working directly with participants, EmpleaT has taken an ecosystem approach to address broader labor market asymmetries, connecting and strengthening a range of actors in order to maximize and sustain impact.

First, EmpleaT built connections and facilitated constructive conversations among the private sector, the government (e.g., the National Service for Women and Gender Equity -- SernamEG), labor intermediaries, and technical schools. The essence of the approach lies in aligning ways of communicating, highlighting common opportunities and interests, and uniting actions and agreements towards common goals.

The perspective EmpleaT gained working directly with project participants allowed it to play a facilitative role throughout the ecosystem. It would cycle information from the ground level to ecosystem actors (e.g., women being excluded from employment at multiple employers) and from ecosystem actors back into the program design (e.g., running a workshop with all actors to discuss the economic, legal, and social value of inclusive hiring).

“ EmpleaT reduces the gap between the companies and the most vulnerable people in these localities so that they feel they have the same possibilities as those in the capital city. We wanted to create these opportunities but didn't know how to or where they were...

EmpleaT brought us closer to the OMIL [Municipal Labor Information Office]; now we have a direct contact which I didn't have before.”

Laurie Bonnemaison, Human Resources,
Ingevent – Private company and employer of
EmpleaT participants

Second, EmpleaT built connections with private companies that serve as potential employers.

Ten private-sector partnerships in the mine's surrounding areas have been established through the referrals by Anglo American. These include international companies such as Aramark, Komatsu, and Sodexo. Partner agreements were signed to open positions for interns from technical schools, receive candidates for permanent-position openings, and support mock interviews.

Finally, EmpleaT has identified ways to directly build capacity within organizations. Some examples include:

- Building capacity in intermediary labor offices—municipal offices responsible for sharing employment opportunities with job seekers, providing job readiness training, etc.—to increase the teams' capabilities, credibility in the workforce market, and alignment with the needs and requirements of local businesses, technical schools, and workforces.
- Training teachers at technical schools on EmpleaT methodologies (e.g. CV development, interview tips, confidence/personal effectiveness), enabling them to improve their ability to prepare students for their internships and increase their placement chances.

CRSCER and EmpleaT continuously exchange their methods, learnings, course corrections, and improvements, contributing to the ongoing refinement of a methodology for increasing employability for youth and women.

TIP: WORKFORCE DEVELOPMENT

Improve the job market. Training to build personal capability and skills is not sufficient to increase job placements; it is essential to improve the job market by engaging key public and private actors and institutions.

BASED ON PROGRAM EXPERIENCE, THE WORKFORCE DEVELOPMENT PILLAR IS EFFECTIVE WHEN:

Skills of potential employees are built through direct implementation to address the “supply” side

There is a deep-reaching approach to promote personal effectiveness (i.e., self-confidence and self-awareness) prior to delivering practical tools like CV development, or mock interviews

“Demand” from potential employers is built and linkages are created through indirect implementation and facilitation

Local demand is created through the development of connections with supporting ecosystem actors:

- Strengthen the intermediary institutions and system (if they exist)
- Influence technical institutions

The private sector is purposefully sensitized and engaged, aware of the benefits to closing the gender or youth gap and the role they can play in accomplish this change

“ Interns from the liceos [technical schools] that have gone through EmpleaT are different from other interns; they seem to know what they want from life. They are better prepared.”

Carlos Larrain, Larrain y Salas – Private company and employer of EmpleaT participants



Erika Rulhe and Roxana Carvajal, participants in Chile's EmpleaT

VALUE CHAIN DEVELOPMENT: INFLUENCING PUBLIC POLICY TO PROMOTE CHEESE PRODUCTION (BRAZIL)



The CRESKER project in Brazil identified the cheese sector as a particularly promising opportunity to promote economic growth. During its first year, CRESKER focused its efforts to develop the cheese value chain on delivering technical assistance and access to markets for 46 cheese producers. A thorough sector diagnostic then highlighted a key insight: while 90 percent of the region's current production was fresh cheese, there was a value-added market opportunity for ripened cheese. Brazil's cheese-producing regions had stopped producing traditional ripened cheese as a result of legislation that only allowed pasteurized dairy products, but there was strong latent demand for these products.

Meeting that demand would mean moving from a commodity market, in which fresh cheese is purchased by intermediaries who set the price, to a value-added market where ripened cheeses are sold at a premium price. Producers could continue to produce some fresh cheese to maintain cash flow, but then increase their income by concentrating efforts on producing ripened cheeses with high market value, using traditional techniques.

The increased focus on an ecosystem approach in the second year of the project significantly increased impact potential. The CRESKER project shared the results of the diagnostic with all key stakeholders—including the Institution for Technical assistance and Rural Extension (EMATER), the municipality, and leading dairy producers—who had participated in the research. The clear business case gave stakeholders an incentive to come to the table and begin a dialogue on what could be done to develop the sector. The document was shared widely across the industry, and CRESKER began hosting sector roundtables to discuss the market opportunity and the gaps revealed by the diagnostic.



When CRESKER started, we thought it was just another technical assistance program, as there are many. But they set themselves apart from the rest in the second phase. Through knowledge sharing, CRESKER created alliances that are much more important because they allow us all to reach more people offering better services and to have more efficient results.”

Carlos Abreu Veterinary, EMATER

This joint effort has yielded results such as:

- The technical assistance organizations (i.e.EMATER and TetraTech) that had each been offering their own training in isolation began cooperating and realizing efficiencies by working together toward common goals.
- The producers, united by the common goal of producing and marketing ripened cheeses, increased their bargaining power and unified representation of their collective interests by founding the Associação Municipal dos Produtores do Queijo do Serro (AMPAQS) in January 2018: this represented **the first association of cheese producers to be formed in the municipality of Conceição do Mato Dentro**.
- In June 2018, the sector achieved one of its key objectives: **a change in regulation allowing sales of ripened cheese outside the state of Minas Gerais, significantly increasing the overall market size**. The movement in Conceição joined voices from other key producing regions (Serro-11 municipalities, Canastrá-5 municipalities) to bring the issue to the national level. New regulations allowing countrywide sales

of ripened cheese was signed into law by presidential decree.

The sector roundtables, with the association of cheese producers as its primary actor, have continued building governance of the value chain and ensuring accountability. The CRESHER project has begun to shift its focus from facilitating the discussions to strengthening governance and institutions within the ecosystem, in order for it to work sustainably on its own.

TIP: VALUE CHAIN DEVELOPMENT

Balance the energy and efforts dedicated to building the capacity of the entrepreneurs and producers with that dedicated to strengthening the ecosystem.



Brazil CRESHER, Ampaqs Cheese Store

BASED ON PROGRAM EXPERIENCE, THE VALUE CHAIN DEVELOPMENT PILLAR IS EFFECTIVE WHEN:

High-potential sectors are identified and prioritized

A thorough, industry-specific diagnostic and plan are developed

Key bottlenecks on the demand and supply sides are identified and addressed

Main value chain actors are engaged by sharing the diagnostic to inform a shared vision

Both entrepreneurs/producers and the ecosystem are engaged by the program throughout

IV. IMPACT AND RESULTS

The program has created impact across all pillars, supporting 5,421 jobs—19% of which are newly created positions.



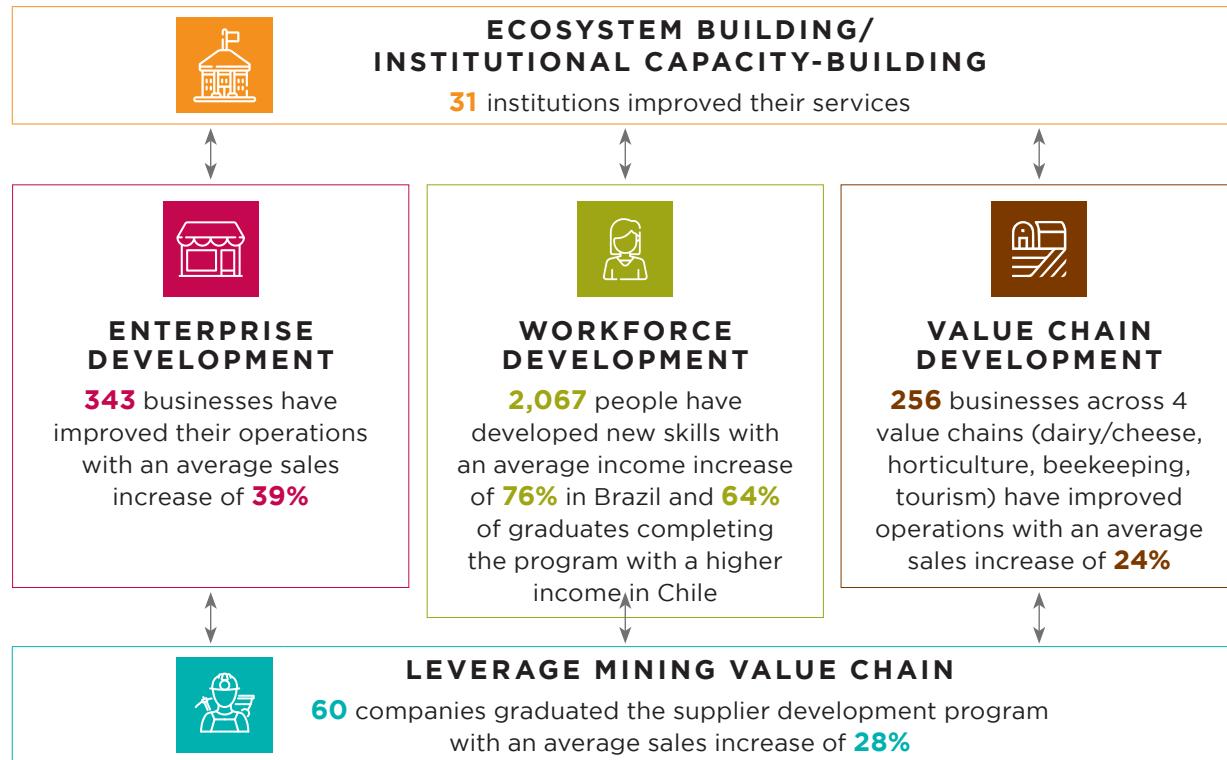
Aurélio de Barros, participant in Brazil's CRESCER

This impact has been distributed across geographies. Emerge Peru has supported more than 343 businesses to improve their operations during a time of economic stagnation; EmpleaT has trained nearly 1,800 participants to improve their employability skills*, and CRESCER has

supported four value chains, with 256 businesses in these sectors adopting new practices. In addition, CRESCER has trained 275 youth as of December 2019 (exceeding the project target of 180 by December 2018).

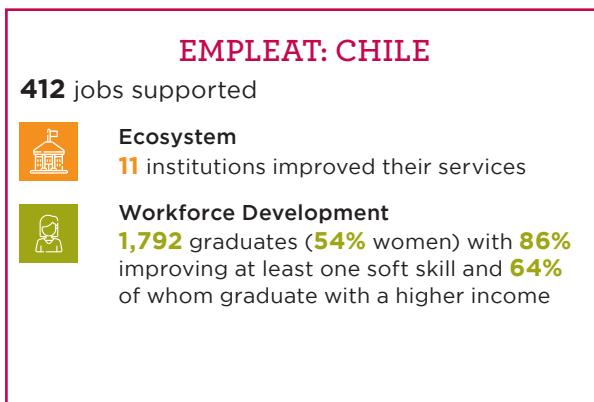
* Includes participants in training sessions carried out both directly by project staff and in partnership with local organizations, such as technical schools and local intermediation offices (OMILs).

Figure 6. Impact Results by Program Pillar and Approach



Ivonne Magna, participant in Chile's Emplea

Figure 7. Country-Level Impact Results



Brazil CRESER

Impact Story: Changing Behaviors, Changing Lives



Moises and Roberta's family



'Jovens Rurais' changes you as a person. That unites us—we grow together. Improving without this help is very difficult. Many times, you don't even know change is an option, and the biggest barriers are shyness and a lack of self-confidence.'

Roberta Silva, project participant

One day while he was visiting the local cultural center at the Santo Antônio do Norte community in Brazil, 21-year-old Moises Silva overheard a conversation that would change his life. A project manager from "Jovens Rurais," CRESCER's initiative to generate employment opportunities for young people, was telling a group of young

people about the program. Moises can still recall what he thought as he listened to her: "My community doesn't have anything or offer anything, and this is an opportunity for something new. I have to enroll." He even invited his aunt, Roberta Silva, who at 29 years old was not much older than he was. She also saw that the project offered a unique opportunity that she could not find elsewhere in the community.

Both entered the program at a moment when their lives were filled with doubts. Moises was studying music remotely while baking cakes and pastries to earn a living. His parents disapproved of his interest in music and were ashamed of his baking, and, as a result, Moises was weighed down by self-doubt and embarrassment. Roberta struggled to overcome her shyness, and she was neither working nor studying. Instead, she passed her days at home.

Through the Jovens Rurais program, however, they came to better understand themselves, their wishes, and their dreams. As they participated in sessions focused on self-awareness, empowerment, and personal effectiveness, they discovered that many of the other young people in the course faced similar insecurities and fears. Watching their peers progress through the program gave Moises and Roberta confidence that they could do it as well. "Sandro, our facilitator, is aware of everyone. It is incredible. He invites you to speak up when you don't have the

confidence to do it. He really connects and cares about us. He helps us to blossom,” said Roberta.

Moises and Roberta gained self-confidence and embraced who they were. Their behavior started to change, and, in turn, that has changed their lives. Together with 10 other young people—half of them former participants of the Jovens Rurais program—they formed a cultural association and founded Casa de Musica to teach young people music, theater, and the arts. Soon, they will be offering a pastry-making course, which they hope will give the women in the community a new skill with which to earn a living. Moises is the music and baking teacher, and Roberta is the association’s secretary.

The positive effects of their improved outlooks have also influenced their family relationships. Once Moises stopped being embarrassed about who he was, he stopped

letting his parents’ comments shake his self-confidence, “I will never know what do to please them, but I now trust myself.” Roberta has been able to inspire her husband to overcome his self-consciousness, too. At first, when he saw her talking and talking, he was shocked by the change and even a little afraid. “Through me, though, he has become more confident and has started to speak up as well. That has had a great effect on our marriage and at his job, and now he has friends as well,” Roberta says.

For his part, Moises can’t help but reflect on the dramatic change in his life that started just by overhearing one conversation. “I didn’t know who I was, and I didn’t value what I did,” he said. “I felt ashamed of baking cakes, and now I understand it is a talent. I’ve continued baking with pride and that has allowed me to build the Casa de Musica.”

Impact Story: New Beginnings



Rebeca Alvarez

“ Through EmpleaT mentoring sessions, I realized that I had qualities that I took for granted and that I had the ability to find a job much better than the one I had aspired to.”

Rebeca Alvarez, project participant

Three years ago, Rebeca Alvarez made a difficult decision. After ending an abusive relationship, the single mother of two adult children decided to leave her hometown in

Ecuador and look for work in Chile's capital city, Santiago. She did not know anyone there, but she needed a new start and sensed opportunity. Even her own children, however, warned the 47-year-old former administrator that she would only find work as a housekeeper or caretaker.

Rebeca's first job in Chile was indeed as a nanny. Soon after, she switched to a part-time job affixing seals on export boxes. She looked for better opportunities, but because she was unfamiliar with the city, had no network of local contacts, and was armed with just a temporary visa, she had no luck finding them.

One day, however, she saw a Facebook advertisement for the EmpleaT project. Figuring she had nothing to lose, she applied. She was accepted and soon enrolled in training workshops and one-on-one mentoring sessions that helped her build personal effectiveness, self-confidence, and practical tools for a job search.

At the same time that Rebeca was looking to restart her career, Francisco Perinetti was looking to hire a cashier for his restaurant. He had graduated from the Emerge Chile project and owned the Hotel Plaza Restaurant in Los Andes. He often saw a member of the EmpleaT team carrying out mentoring sessions at his restaurant and asked her to

help him find candidates. "You can see the difference of EmpleaT candidates. They seem better prepared; they look you in the eye, show confidence, and have clear ideas about who they are and what they can offer," Francisco said. "I trust the program, and have more confidence knowing that these people have gone through a serious process to become better employees."

The EmpleaT staff member sent Francisco three resumes, and one of them was Rebeca's. She got the job—less than two months after completing the program. Rebeca has been working for Francisco for almost a year now, and the stable job and income has changed her life. As a lifelong saver, she is happy to once again be earning enough to put some money in the bank. "As a single mom, I learned that I had to save to be prepared for any unforeseen situation," she explains.

But the impact of the EmpleaT project has not been solely financial. Rebeca has also regained self-confidence and made new friends. A co-worker at her new job even introduced her to her current fiancé. "By participating in EmpleaT, I accessed a network. I became part of the formal labor market...[my mentor] Camila made me realize my work experience in Ecuador was relevant and that my life story was valuable. Without that I would not be sitting at this desk."

Impact Story:

Marvelous Hands and Marvelous Markets



Emerge Peru participant, Claudio Chávez Tejada

“ We have become a true business. We've learned to capture and sustain clients and to turn challenges into opportunities.”

Teresa Blanco, project participant

In August 2015, Teresa Blanco and Maritza Peñaloza, established a crafts association in Moquegua to produce traditional dolls and copper engravings. “Why couldn't the region be recognized for more than mining?” they thought. They named the association “MAKIKUNA,” which means “marvelous hands” in the indigenous Quechua language. The association had a successful start. About a year after its formation, the members had built a reputation within the community and started giving crafts workshops at Anglo American's Information Centre (a community gathering place offering free

workshops and exhibits on the region's art and culture) in Moquegua.

But then, unexpectedly, Teresa lost her sight. She thought she could not continue working. The members of the association valued her strategic vision more than her eyesight, however, and nominated her to preside over MAKIKUNA. “We were all focused on design and production. I'm also in charge of the commercializing; we needed someone to plan and think,” explained Maritza.

In early January 2018, at Anglo American's Information Centre, Teresa and Maritza heard about the Emerge project and signed up. The training enabled them to professionalize their business and identify new, broader market opportunities they had not considered before. “Emerge's advisor helped us distribute responsibilities according to skills and organize our finances and pricing,” said Teresa.

MAKIKUNA attended the business fair held in Moquegua in November 2018—the Peruvian Ministry of Production, in partnership with Anglo American and the Emerge team, organized two such events—and left with three new clients: Anglo American, Fluor (in charge of managing all contractors for the construction of the Quellaveco mine), and Casa Andina Hotel.

In the last 12 months, MAMIKUNA has increased its sales by 20 percent and, since the business fair, has had consistent monthly

purchases from these clients. In the last year, Maritza says many other groups have approached her and Teresa for advice on how to make an association work.

“We have become a true business. We’ve learned to capture and sustain clients and

to turn challenges into opportunities,” says Teresa. Maritza adds that Emerge helped expose them to new, broader opportunities for selling their crafts.

Impact Story: Business Sprouts from the Garden



Simone Simões, participant in Brazil's CRESCER

“ Now I have money to save, buy clothes, and go to the salon. I love being able to get my hair done—I feel pretty.”

Simone Simões

Simone Simões used to harvest the vegetables from her garden in Minas Gerais, Brazil. She would devote most of the vegetables for family consumption and sell what was left at the local Friday market, earning a weekly income of about \$20. There were no other market options at the time, and she did not realize there was potential to make a living out of horticulture.

Two years ago, she joined CRESCER and started receiving technical assistance to turn the garden into a business that could be linked to the horticulture value chain. “The most important thing I’ve learned was how to grow the seedlings, ways to plan ahead and plant all species, and to register sales,” she said. Simone now has a contract with the public local procurement office to supply her produce for meals at local schools – an opportunity created by CRESCER’s advisory to the Prefecture of Conceição do Mato Dentro on improving its

local procurement. This contract includes fixed prices 30 percent above the regular market, a step taken to promote local family production. Eighty percent of what she produces in her 1,700 square-meter garden goes to the schools, and the rest is sold at the Friday market.

Her weekly income has increased to US\$100. "Now I have money to save, buy clothes and go to the salon. I love being able to get my hair done—I feel pretty," said Simone.



Emerge Peru participants, Maritza Juárez Peñaloza, Ana Arias and Roxana Arias



V. CONCLUDING INSIGHTS AND LESSONS LEARNED

The insights and lessons learned from the program serve to inform future local economic development projects' design and implementation.

After three years of implementation, Beyond Extraction provides useful insights into how mining companies' investments may enable sustainable, inclusive local economic growth. While it leverages the presence of Anglo American, the strategy implemented by Beyond Extraction activates new opportunities for wealth creation independent of the mine and strengthens the ecosystems to support the long-term continuity of such opportunities.

LESSON #1: MINING COMPANIES CANNOT DO IT ALONE.

Some well-intentioned programs may aim to tackle complex issues independently. However,

the Beyond Extraction experience program points to the effectiveness of taking a more collaborative approach. This can begin by identifying unmet needs within the scope of work, and then working together with the ecosystem's actors to determine what capacities can be built, what information can be shared, and what linkages and conversations can be facilitated. Moreover, the Beyond Extraction approach focuses on interventions that complement what the ecosystem actors are already doing, rather than competing with or duplicating efforts.

LESSON #2: “LONG TERM” IS THE MANTRA FOR AN ECOSYSTEM APPROACH.

While the conviction that a long-term approach has the highest potential for sustainable impact may be well-established at a partnership’s headquarters level, this focus can become de-prioritized as local business units face immediate demands on the ground. Establishing efficient partnership governance that assures fast, well-informed decision-making and an active participatory presence safeguards the common goals and allows the program to maintain its long-term vision.

LESSON #3: WORKING WITH THE ECOSYSTEM REQUIRES NIMBLENESS AND FLEXIBILITY.

The Beyond Extraction experience has shown that it can be more effective to start with a pilot, improve and deepen understandings, and refine the methodology based on the learnings from the pilot, rather than seeking to build the “perfect” plan and then immediately implementing it with ecosystem actors. This graduated approach builds credibility, engaging relevant actors and inviting their feedback throughout the process (rather than “imposing” a ready-made plan) and results in consolidated implementation and results. Ecosystem actors should be involved from the beginning and throughout the program, including in the following activities:

- *Diagnostic:* The project should interview all key stakeholders for the diagnostic and share and discuss the results with them
- *Results measurement and evaluation:* Transparency and on-time course correction strengthen trust and create engagement. Sharing results with key stakeholders, acknowledging the need for course correction in a timely fashion, and proposing solutions to further improve the program along the way all motivate behavior change
- *Knowledge management:* Systemizing, documenting, and disseminating the

experience and knowledge generated by the program helps replicate actions in other host communities

LESSON #4: FOCUSING ON THE BROADER MARKET IS KEY.

Implementation of the program has underscored that an over-emphasis on linking to the mining value chain can lead to risks, such as perpetuating dependence on the mining company and lost opportunities to develop other high-potential sectors or value chains. This is particularly important as employment prospects at mining companies are limited (particularly after the construction stage), and not all local businesses have the potential to be linked to the mine’s supply chain. Therefore, understanding the competitive advantages and market opportunities of the entire local economy is an essential first step in determining program activities. It is vital to evaluate diversification options at different time horizons, identifying not only existing opportunities but also those sectors and value chains that, while not mature in the present, have the potential to develop and drive economic prosperity in the medium and long-term.

ONGOING CHALLENGES:

Sustainability: While the program motivated self-reflection, collaboration and action in both participants and partner institutions, building a strong and functional ecosystem takes time and requires deep cultural and structural changes. Institutional capability gaps remain, and without the program as a facilitating and bonding actor, strong institutions with credibility and a market-driven mandate will have to drive the conversations and ensure accountability.

- *EmpleaT (Chile):* The workforce ecosystem is at a relatively advanced stage, though the linkages between some actors remain fragile. Organizations (OMILs, technical schools, etc.) maintain that they still require more capacity building to internalize methodologies and ultimately eliminate current market asymmetries.

- CRESCER (Brazil): The ecosystem's degree of dependence on the project varies across sectors, therefore requiring more or less intense involvement by the project team.
- Emerge (Peru): Unlike EmpleaT and CRESCER, Emerge faces an extremely limited entrepreneurship ecosystem. The project mapped and gathered key stakeholders and has facilitated working sessions to join them in the pursuit of a common goal. However, it is still an incipient system. Gaps in public institutions, academia, and chambers of commerce remain and must be addressed in order to consolidate the necessary trust, links and interactions. Lessons from Chile and Brazil's direct intervention in public organizations will prove useful.

Time: The program requires more time to ensure sustainable impact by consolidating knowledge and capacities among program stakeholders, heightening the integration and functioning of the networks, leaving installed capacity in public institutions, and further influencing public policy to establish latent market opportunities for many sectors.

Impact Measurement: To build more efficient, strategic, coordinated, and systematized public-private partnerships, it would be useful to have an overarching methodology to evaluate all the typical impacts when mining enters a region (i.e., a framework that maps the socioeconomic, cultural and environmental factors that are typically affected)

- Capturing the full impact of the crosscutting ecosystem approach is a challenge. Concrete, quantifiable indicators are critical to articulate the benefits and impact of the long-term vision to the private mining company's corporate metrics, and these do not yet exist for systemic approaches. A third party study can help prove the value proposition/incentives and return on investment for mining companies to invest in this long-term, strategic way.

Technology: There is an opportunity to harness technology to increase impact and scale with modest increases to overall program costs.

- Thus far, Beyond Extraction has used technology in a limited fashion, primarily as means to improve participant recruitment, to provide sector-relevant information, and to provide entrepreneurs with basic accounting systems. For example, EmpleaT uses Facebook to recruit participants, and its mentors use WhatsApp to follow-up on participants between sessions, while Emerge has helped entrepreneurs set up basic Excel tools to track financial performance. It is worth noting that the introduction of even simple technological tools can have an impact on both workers' skills and overall business performance.
- However, there are latent opportunities to use technology to consolidate the methodology, provide continuous learning and improve business management. This may include, for example, self-administered training (e.g., videos) to consolidate knowledge, refresh what was learned, and replace some of the workshop content for participants with less flexible schedules or constraints to travel (e.g., more rural participants). There are also opportunities for the development and diffusion of better data-analysis tools, such as inventory systems.

Knowledge Sharing: There are opportunities to be more effective and systemic about the exchange of knowledge generated through the program, so that other organizations, mining companies, and donors have the tools and information to adopt this LED approach. The present case study is a first attempt at addressing this challenge and seeks to open a continued dialogue.



Emerge Perú participant, Jessica Maribel Chambilla Ramos



VI. APPENDIX

Figure 8. Evolution of Emerge Chile

CONTINUOUS LEARNING AND REFINEMENT	<p>2011 Simple design (business plan preparation) for 80 participants</p> <p>2013 Pilot of differentiated curricula and program length based on business size (Levels 1 & 2); Given pilot success, began more complex design (4 workshops with e-Learning, 1:1 mentoring and aftercare)</p> <p>2014-15 Continued refinement of curriculum content and delivery methods</p> <p>2016 Added larger businesses (Level 3) with aim of supplying larger industries (mine & non-mine related); diversified approach set foundation for inclusiveness & sustainability</p> <p>2017-Present Continued refinement of curriculum content and delivery methods</p>
TEAM SELECTION	<ul style="list-style-type: none">• University degree in business• Experience in the private sector• Business acumen• Motivation for social impact• Social development, and entrepreneurial activities• Experience in project formulation and evaluation• Empathy• Leadership• Initiative• Excellent analytical skills• Teamwork• Excellent communication skills
PARTICIPANT SELECTION	<ul style="list-style-type: none">• Ensure the candidate's expectations align with what the program offers (ensure access to finance is not the only/primary reason for applying)• Select candidates with a genuine interest to learn new tools and models to grow; ideally with a growth plan or idea
RESULTS	<ul style="list-style-type: none">• Over 1700 entrepreneurs have gone through the program• 50% sales growth among Level 1 and Level 2/3 participants• 300 participants per year with 70% graduation rate• >6 ROTI (i.e., \$6 in income gains for every \$1 spent); in 2016 achieved ROTI of >13• ~37% reduction in cost per participant from 1st to 8th cycle• Close to 1,000 applications per cycle for 150 available spots (strong reputation)

Figure 9. Program Results, as of March 2020

	Program Target	Number Trained	Number Graduated	% of Target Achieved
ENTERPRISE DEVELOPMENT				
<i>Target: Number of participants trained—entrepreneurs</i>				
Peru	645	589	343	91%
WORKFORCE DEVELOPMENT				
<i>Target: Number of women/youth trained</i>				
Chile	1,300	2,345	1,792	180%
Brazil	180	296	275	164%
Total	1,480	2,641	2,067	178%
VALUE CHAIN DEVELOPMENT				
<i>Target: Number of participants trained—entrepreneurs</i>				
Brazil	180	332	256	184%
ECOSYSTEM				
<i>Target: Number of institutions in the supporting ecosystem that improved their services</i>				
Chile	5	11		220%
Brazil	7	20		286%
Peru	4	4		100%
Total	16	31		194%
LEVERAGE MINING VALUE CHAIN				
<i>Target: Number of businesses graduated</i>				
Peru	80	88	60	75%
Grand Total	2,401	3,681	2,726	153%
JOBs CREATED				
<i>Target: Number of net jobs created</i>				
Brazil	15	12.5		83%
Peru	181	1,007		556%
Total	196	1,019.5		520%
JOBs SUPPORTED				
<i>Reported only; no formal target set</i>				
Chile	NA	412		NA
Brazil	NA	743		NA
Peru	1,875	3,247		173%
Total	1,875	4,402		235%



Emerge Peru, business participant Animal Center Torres

VII. ACKNOWLEDGEMENTS

The following people kindly gave their time to support the research for this case study:

BRAZIL

Flávia Magalhães, Prefecture of Conceição do Mato Dentro, Secretary Administration and Human Resources

Silvana Lages, Prefecture of Conceição do Mato Dentro, Secretary of Culture and Heritage

Junia Silva, Prefecture of Conceição do Mato Dentro, Director, Municipal Parks of Tabuleiro, Monumento Serra da Ferrugem and Salão de Pedras

Carlos Frederico Abreu, Institute of Technical Assistance and Rural Extension (EMATER), Veterinarian / Rural Technician

Geraldo Oliveira, LOJA do Queijo (Cheese Shop of the AMPAQS Cheese Association), Salesperson

Itamar Saldanha Oliveira, CRESCER, Program Participant (Rural Youth)

Jaqueleine Gomes Souza, CRESCER, Program Participant (Rural Youth)

Moisés Elias Silva, CRESCER, Program Participant (Rural Youth)

Roberta Júnia Silva e Silva, CRESCER, Program Participant (Rural Youth)

Wesley Lúcio David Silva, CRESCER, Program Participant (Rural Youth)

Simone Simões Pimenta, CRESCER, Program Participant (Rural Producer)

Jeso Ares Damazio, CRESCER, Program Participant (Rural Producer)

TechnoServe Team, CRESCER, Full Team

David Williams, TechnoServe, Former Country Director—Brazil

PERU

José de la Paz, Municipality of Mariscal Nieto, Chief of the Technical Cooperation and External Markets Office

Dora Cuba, Ministry of Production, Coordinator

Juan Villanueva, Municipality of Ilo, Chief of Studies

Washington Zeballos, Public University, Dean

Carlos Marcel Gonzales, Lugonal (Agua Elysian), Program Participant (Entrepreneur)

Justina Feliciano Sameuco, Hotel Gran Mariscal, Program Participant (Entrepreneur)

Smith Hinojosa Poma, Repuestos Moquegua, Program Participant (Entrepreneur)

Christian Linares, Karel Clean, Program Participant (Entrepreneur)

Teresa Blanco, Maki Kuna Artisan Association, Program Participant (Entrepreneur)

CHILE

Lesly Meyer, The National Service for Women and Gender Equity -- SernamEG, Good Practices Staff

Bárbara Oyarzún, Municipal Labor Information Office (OMIL) Lo Barnechea, Coordinator

Pablo Soto, Municipal Labor Information Office (OMIL) Colina, Coordinator

Natalia Santibañez, Municipal Labor Information Office (OMIL) Colina, Private Partnerships Responsible

Rocio Vargas, Municipal Labor Information Office (OMIL) Til-Til, Coordinator

Jaime de la Melena, Municipal Labor Information Office (OMIL) Nogales, Labor Counselor

Elka Rulhe, EmpleaT, Program Participant

Maritza Peñaloza, Maki Kuna Artisan Association, Program Participant (Entrepreneur)

Victor Huacho, WARI Apricot Association, Program Participant (Entrepreneur)

Muller PRE, WARI Apricot Association, Program Participant (Entrepreneur)

Alberto Jimenez, Regional Government Moquegua, General Manager

Cecilia Ortiz, International Youth Foundation, ADELANTE Youth Project Coordinator

Francisco Raunelli, Anglo American Quellaveco, Socio-Economic Development Manager

Juan Manuel Tamayo, Anglo American Quellaveco, Local Procurement Manager

TechnoServe Team, Emerge Peru, Full Team

Roxana Carvajal, EmpleaT, Program Participant

Rebeca Alvarez, Hotel Plaza, Cashier and Administrative Assistant (Former Program Participant)

Edith Astudillo, EmpleaT, Program Participant

Alejandro Figueroa, Ingevent (Partner Company), Mechanic (Former Program Participant)

Jaime Espinoza, Ingevent (Partner Company), Workplace Hazard Prevention (Former Program Participant)

Mario Hidalgo, Technical School Carmelitas, Pedagogical Technical Unit

Carlos Gallardo, Technical School Los Andes, Dean

Noelia Rossinelli, Technical School Los Andes, Pedagogical Technical Unit

José Lazcano, IPLA Institute, Dean

Francisco Perinetti, Hotel Plaza (Partner Company), Manager

Sofia San Martin, Polpaico (Partner Company), Corporate Social Responsibility Analyst

Francisco Rivas, Polpaico (Partner Company), Corporate Social Responsibility

Laurie Bonnemaison, Ingevent (Partner

Company), Human Resources

Gianni Ferrufino, Larrain y Salas (Partner Company), Contracts administrator

Carlos Larrain, Larrain y Salas (Partner Company), General Manager

Verónica Arenas, Anglo American, Entrepreneurship, Employability, and Local Procurement Responsible

TechnoServe Team, EmpleaT, Full Team

GLOBAL

Natascha Cunhas, IDB, Senior Sector Specialist - Extractive Sector Initiative, Infrastructure & Energy Department

Martin Walter, IDB, Sector Specialist - Extractive Sector Initiative, Infrastructure & Energy Department

Tomas Lopes, IDB Lab, Investment Officer

Natalia Laguyas, IDB Lab, Specialist - Operations Programming Unit

Jon Samuel, Anglo American, Group Head of Social Performance and Engagement

Maike Von Heymann, Anglo American, Social Performance Principal -- Socioeconomic Development



Tele TAXI

053 481500

Seguridad y Garantía

953682018

f TELE TAXI ILO

Dirección: Jr. Callao N° 946

E-mail: jdr_teletaxi_eirl@hotmail.com

i Tele Taxi Siempre a tu Se



Emerge Peru participant, Oscar Apaza Telles

VIII. ENDNOTES

- i Bárcena, Alicia, 2018: Estado de situación de la minería en América Latina y el Caribe: desafíos y oportunidades para un desarrollo más sostenible, Lima: CEPAL, https://www.cepal.org/sites/default/files/presentation/files/181116_extendidafinalconferencia_a_los_ministros_mineria_lima.pdf.
- ii Franks, Daniel & Rachel Davis, 2014: Costs of Company-Community Conflict in the Extractive Sector: Corporate Social Responsibility Initiative at the Harvard Kennedy School.
- iii Ibid.
- iv Ecosystem may be defined as the social and economic environment and, public and private actors affecting the local or regional sector, market or issue. The strength of the ecosystem depends on the efficiency, stability and governance of the network, as well as on its ability to support the evolution of the corresponding sector, market or issue.
- v See page ‘IV. IMPACT AND RESULTS’ in this document.
- vi Bárcena, Alicia, 2018: Estado de situación de la minería en América Latina y el Caribe: desafíos y oportunidades para un desarrollo más sostenible, Lima: CEPAL, https://www.cepal.org/sites/default/files/presentation/files/181116_extendidafinalconferencia_a_los_ministros_mineria_lima.pdf.
- vii Center for International Development at Harvard University: The Atlas of Economic Complexity, <http://atlas.cid.harvard.edu/>:
 - Peru: <http://atlas.cid.harvard.edu/explore/?country=173&partner=undefined&product=undefined&productClass=HS&startYear=undefined&target=Product&year=2016>
 - Chile: <http://atlas.cid.harvard.edu/explore/?country=42&partner=undefined&product=undefined&productClass=HS&startYear=undefined&target=Product&year=2016>
 - Brazil: <http://atlas.cid.harvard.edu/explore/?country=32&partner=undefined&product=undefined&productClass=HS&startYear=undefined&target=Product&year=2016>.
- viii ICCM, 2018: Role of Mining in National Economies, London: https://www.icmm.com/website/publications/pdfs/social-and-economic-development/181002_mci_4th-edition.pdf.
- ix Conflict may be defined as “a continuum, from low-level tension to escalated situations involving a complete relationship break-down or violence.” See Franks, Daniel & Rachel Davis, 2015: Costs of Company-Community Conflict in the Extractive Sector: <https://politicaspublicas.uc.cl/wp-content/uploads/2015/01/presentacion-daniel-franks.pdf>.

- x Franks, Daniel & Rachel Davis, 2014: Costs of Company-Community Conflict in the Extractive Sector: Corporate Social Responsibility Initiative at the Harvard Kennedy School.
- xi For example, in 2018 mining and quarrying accounted for 2.4 percent of Chile's workforce, 1.1 percent in Peru, and 0.4 percent in Brazil. See International Labour Organization, 2019: ILOSTAT: Employment by sector - ILO modelled estimates, November 2018: <https://www.ilo.org/ilostat/>.
- xii Franks, Daniel & Rachel Davis, 2015: Costs of Company-Community Conflict in the Extractive Sector: <https://politicaspublicas.uc.cl/wp-content/uploads/2015/01/presentacion-daniel-franks.pdf>.
- xiii Ibid.
- xiv Cooperativa.cl, 2017: Luego de 43 días termino la huelga en Minera Escondida: <https://www.cooperativa.cl/noticias/pais/trabajo/negociaciones-colectivas/luego-de-43-dias-terminala-huelga-en-minera-escondida/2017-03-23/125744.html>
- xv eNCA, 2018: Anglo American restarts iron ore mine in Brazil: <https://www.enca.com/business/anglo-american-restarts-iron-ore-mine-brazil>
- xvi El Comercio, 2019: El costo del bloqueo de Las Bambas: <https://elcomercio.pe/economia/peru/costo-bloqueo-bambas-mina-produce-2-cobre-mundo-noticia-620696>
- xvii Franks, Daniel & Rachel Davis, 2015: Costs of Company-Community Conflict in the Extractive Sector: <https://politicaspublicas.uc.cl/wp-content/uploads/2015/01/presentacion-daniel-franks.pdf>.
- xviii Franks, Daniel & Rachel Davis, 2014: Costs of Company-Community Conflict in the Extractive Sector: Corporate Social Responsibility Initiative at the Harvard Kennedy School.
- xix Cameron, Peter & Michael Stanley, 2017: Oil, Gas, and Mining - A Sourcebook for Understanding the Extractive Industries, Washington: World Bank.
- xx Area of influence is defined here as the mine and the government-defined municipalities that will receive most of the environmental and socioeconomic impact. The population of the area of influence is the sum of all people that live in the corresponding defined municipalities.
- xxi Warner, Michael & Rory Sullivan, 2017: Putting Partnerships to Work: Strategic Alliances for Development Between Government, The Private Sector and Civil Society, New York: Taylor and Francis.
- xxii Agencia IBGE <https://agenciadenoticias.ibge.gov.br/en/agencia-press-room/2185-news-agency/releases-en/15766-pnad-continua-taxa-de-desocupacao-cai-em-11-das-27-ufs-no-2-trimestre-de-2018>
- xxiii FJP DADOS Brazil, Proporção de pessoas de 15 a 29 anos que não trabalhavam e não estudavam segundo grupo etário (%). <http://fjpdados.fjp.mg.gov.br/educacao/>
- xxiv LTPULSO, 2019: Desempleo juvenil se mantiene por sobre el 17% en los últimos 8 años y participación baja 4,7 puntos: <https://www.latercera.com/pulso/noticia/desempleo-juvenil-se-mantiene-17-los-ultimos-8-anos-participacion-baja-47-puntos/244847/>
- xxv Instituto Nacional de Estadística INE (Chile), 2016: Encuesta Nacional de Empleo: <https://www.ine.cl/estadisticas/laborales/ene>

ABOUT TECHNOSERVE

TechnoServe works with enterprising people in the developing world to build competitive farms, businesses and industries. We are a nonprofit organization that develops business solutions to poverty by linking people to information, capital and markets. Our work is rooted in the idea that given the opportunity, hardworking men and women in even the poorest places can generate income, jobs, and wealth for their families and communities. With more than four decades of proven results, we believe in the power of private enterprise to transform lives.



Brazil Horticulture

INTERNATIONAL HEADQUARTERS

1777 N Kent Street, Suite 1100 | Arlington, VA 22209

Tel: +1 202 785 4515 | Fax: +1 202 785 4544

TECHNOSERVE.ORG

