

DEVELOPMENT OF SUSTAINABLE SMALL BUSINESSES IN MINING-AFFECTED COMMUNITIES

Suzette McFaul¹, Andre Xavier², John Meech²

¹SEF Canada Ltd., #2004-1225 Richards St.,
Vancouver, BC Canada V6B 3G3

²Norman B. Keevil Institute of Mining Engineering,
The University of British Columbia, Vancouver, BC, Canada, V6T1Z4

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ABSTRACT

Mine closure planning is an evolving activity that today includes development of a parallel economy based on non-mining activities and support. The options available to a company to create a new community or use an existing one to support the non-working life-style of its employees have switched in recent years to the use of fly-in-fly-out camps. While this approach may reduce infrastructure costs, over the long term the best choice may depend on a myriad of factors such as ore body life and value, remoteness of the mine site, availability of an existing community, culture of existing inhabitants, availability of trained workers, etc. Many mining companies today are recognizing that a new community needs to develop a multi-dimensional economy that initially might integrate with the production activities of the mine, but eventually must be able to stand on its own after mining ceases. This paper describes a novel approach to help entrepreneurs create new businesses at a remote mine site that can grow the community in a sustainable way to survive the eventual demise of the dominant industrial activity.

INTRODUCTION

A mine eventually closes once the ore-body is depleted or the values derived from the ore exceed the cost to produce these values. The creation of a mine demands that infrastructure is built to support the workforce who runs the mine. In days of old, mine closure resulted in the creation of a so-called "ghost-town". The cost of initially creating these new communities has become excessive and has added significantly to the up-front capital costs of building a new mine. With the intention of creating positive relationships as well as to enhance the quality of life in host communities, mining corporations have traditionally turned to philanthropic models, which have engendered donor-recipient relationships that are not sustainable in the long run as they do not focus on building capacity within the community to sustain itself after mine closure.¹ Unless efforts are made to diversify the local and regional economy, mining companies can create a situation of 'cultures of dependency' which leads to problems following mine closure.²

In terms of regional planning, based on recent experiences in Latin America, an imperative has been identified to improve the competitiveness of local mining industries through enhancement of the local business environment through better coordination of local and regional public institutions related to mining.³ This is supported by the International Council on Mining and Metals (ICMM) in its Community Development Toolkit which recommends that:

"Our job is to enhance the benefits from the mining project through economic stimulus. For long-term community and economic viability and sustainable community development, it is vital that efforts be made to help diversify local economies".⁴

In more recent times, mining companies have taken a different approach to the problem by creating fly-in-fly-out camps in which the workforce is flown to the site for a 14-day work period of one 12-hour shift per day followed by a return flight to where one's family lives for a 14-day "rest" period. These camps are more compact than a new town, but have facilities for off-time in the form of recreation, meal support, and sleeping. As such, the up-front costs are appreciable reduced but the on-going operational costs of flying all employees back and forth and running the camp are higher than they would otherwise be if a new town was created. Part of the decision-making also includes accessibility of the site by roads which may also add additional costs in their creation and maintenance.

Recently, mining companies have been examining a third approach in which the community is created in a way that it can sustain itself even after the mine closes. By investing in the creation of new sustainable small businesses that initially provide supplies or services to the mine, but eventually become independent of the mine by creating a parallel economy, "ghost towns" are not created. To do this, by the time the ore becomes depleted, the town must grow to a size in which the mine only supports about half of the employment value opportunities that both directly and indirectly support the mine.

To achieve this level, if the mine's payroll is \$80 million per year (~1,000 jobs @ \$80,000/year), the number of small businesses needed to be created over a 20-year life of mine to create real sustainability would be 180, an average of 9 per year, assuming the annual cash flow of each new business will start at about \$300,000. The types and sizes of each business will vary considerably depending on many factors – social, political, cultural, and method used to create new enterprises. This paper describes a bottom-up, community-based methodology that has proven successful at creating well over 10,000 small businesses at locations all around the world in both First World and Third World locations. The success rate of this program over a 5-year period is about 80% (i.e. 8 out of 10 new businesses are sustained).

THE METHODOLOGY

Entrepreneurship is a powerful means to diversify and strengthen a local economy. The philosophy of entrepreneurship fits in well with the mining industry. It requires passion to produce – to supply a product or service of interest that is in demand. It requires preparation of a verifiable, rational business plan to establish the market for the product or service and the methods and costs of production and unit sales price.

Starting a business is easy; keeping it open is not. On average throughout the world economy, dedicated and passionate individuals launch into the marketplace and then over 80% are forced to close their doors within 60 months. Statistics⁵ indicate 40% of businesses fail in the first 2 years and of the remaining enterprises, 80% fail within the next 3 years.

Businesses assisted by Entrepreneurial Development (ED) programs have a **better than 80% success rate**, turning the business success rates upside down. Small-to-Medium Enterprises (SMEs) represent about 66% of permanent, full-time employment¹. The methodology has developed from experiences and insights that have evolved in this field since 1997. The program is tried, true, and tested. With each project, the method has been successful at attracting passionate citizens and professionals who partner and collaborate to *learn how to manage their local* entrepreneurial development project.

The average cost to create a new job in this program is about \$1,500. No other program that we know of can promise such a low cost to create jobs and guarantee that the new businesses will be sustained after 5 years. These new jobs create a new cycle of money flow through the local economy. This positive return on investment demonstrates that using the entrepreneurial energy and spirit of local residents is a smart strategy for civic leadership. In considering this return, it is important to keep several factors in mind. First, there are many economic benefits that derive from new businesses – taxes, reduced welfare benefits required for new employees or business owners, and increased circulation of money within local communities.

ENTREPRENEURIAL DEVELOPMENT (ED) MODEL RATIONALE

As communities experience increasingly critical needs such as declining economies and related civic and social challenges, local leaders must respond and provide a solution. It is the entrepreneurs who can transform resources and generate new wealth in a community. Entrepreneurship and the power of creating jobs by ones and twos are central to growing communities in today's economy. The ED method presented here helps vibrant communities harness the power of new and existing local entrepreneurs to bring sustainable change. The program has had remarkable success around the world, in places large and small, rural and urban.

An empowered and engaged community will create a sustainable economy. Exploring collaborative opportunities in the economic development sector is an important part of this work, and worth the investment. Activities such as local business programs and the building of new infrastructure can add value to a community, but the ED approach goes one step further – it engages the grass roots in collaborative activities to stimulate new businesses. The program has been applied in over 300 communities on four continents creating employment and long term sustainability with business retention rates over 80%.

Comprehensive economic development activities first address the need for a program and then begin to build the capacity of people to use the program. It is true that without roads, communication services, transportation, education, credit and capital, etc., a community will find it difficult to survive. Similarly, for local enterprises to be built and become sustainable it is also true that, no matter how sophisticated the local infrastructure, without people using it, these businesses will soon fail.

The Entrepreneurial Development model (ED) builds community capacity for local entrepreneurs to access programs and infrastructure *when they are ready* thereby optimizing use of these programs and infrastructure. Budding entrepreneurs cannot be helped successfully until they ask for help. To begin the development process, as many members of the community as possible must be made aware that the program exists and how it works.

THE WHEEL OF SUSTAINABILITY

The left side of the wheel in Figure 1 shows programs, infrastructure, and environment in a community, while the right side of the wheel represents people, ideas, and grassroots projects. This is where the Technical Advisor and the Management Team provide links between the two sides. The two approaches are detailed below:



Figure 1. The wheel of sustainable small business enterprise development – it begins with passionate people in the community.

The left side of the wheel in Figure 1 shows programs, infrastructure, and environment in a community, while the right side of the wheel represents people, ideas, and grassroots projects. This is where the Technical Advisor and the Management Team provide links between the two sides. The two types of approaches are as follows:

Top-Down	Bottom-Up
<ul style="list-style-type: none"> • Strategic Plans • Tourism Planning • Industrial Parks • Infrastructure Creation • Finance Programs • Micro-Lending • Incubators • Main Street Beautification • Energy with the Planner 	<ul style="list-style-type: none"> • People's Dreams and Ideas • Entrepreneurship • Innovation • Self-Motivation • New Business Starts • Business Expansions • Mentoring • Synergy within the Community • Energy with the Client

PRINCIPLE BELIEFS BEHIND THE PROGRAM

- Intelligence and ideas for businesses exist everywhere;
- Competent, confidential, personalized services that work for entrepreneurs *just in time and as needed* can liberate these ideas;
- Probability of success in a business will increase if a team of individuals with different personalities, skills, and passions convene to develop solutions;
- Community networks result in unprecedented pride for all engaged parties.

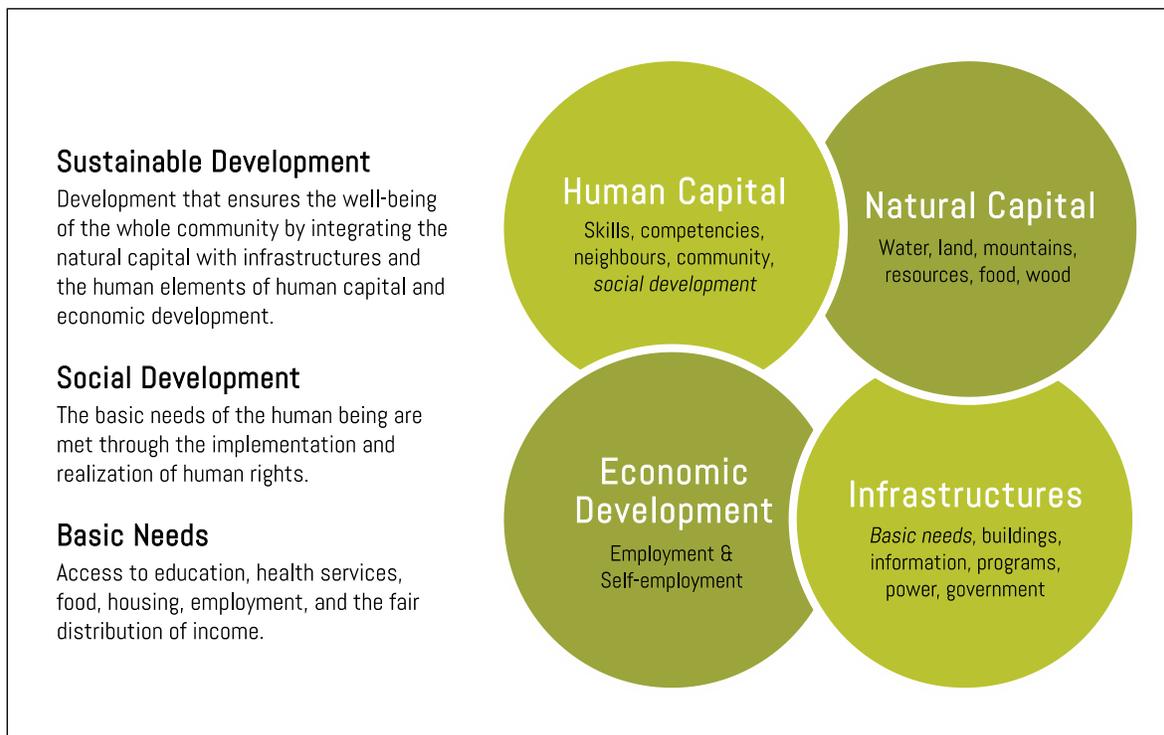


Figure 2. Enterprise/Economic development is a necessary part of a sustainable community.

These principles feed into and out of the concept of sustainable, caring communities that work collaboratively to address issues that can enhance the living conditions and social interactions among the citizens that populate that community. The various parts consist of the four circles in Figure 2: human capital, natural capital, economic development, and infrastructure. The enterprise development program discussed in this paper builds off these four parts to increase the positive interactions among people in the community to source out expertise and skills that can help each new entrepreneur to develop a successful business.

CREATION OF THE ENTREPRENEURIAL DEVELOPMENT PROGRAM

The program is initiated by hiring a Technical Advisor to recruit, train, and mentor the following individual aspects of the program:

- A Management Team consisting of a core representation from across the community;
- A Facilitator;
- A Resource Team of volunteers to network the Facilitator into the community and brainstorm about local resources.

The **Management Team** is set the task to create the ED services and to integrate its activities within the community. The Technical Advisor will provide ongoing support and training to the Management Team in all matters pertaining to successful implementation of the program. The Management Team is the core group in the program that represents a wide variety of organizations interested in Economic Development to initiate collaboration and networking. Ideally each stakeholder in this team would contribute to the funding of the project either as in-kind or monetary support. It is a multi-stakeholder governance model.; creating a level playing field between the mine and the community.

The Facilitator operates at the grassroots level within the community to interact with local would-be and existing entrepreneurs wanting to establish or expand a particular business

enterprise. The Technical Advisor assists the Management Team in the recruitment, training and mentoring of the Facilitator. The Facilitator reports to Chair of the Management Team at least once per month. The Facilitator is networked into the community by the Resource Team. Experience suggests that 300 introductions in the first 90 days will generate a number of clients. If introductions are NOT being made, that is a concern that the Technical Advisor will address with the Management Team. The Facilitator does not operate out of an office. Meetings take place in the community at coffee shops or other social locations. The program is not pushed onto the clients – they must elect on their own to avail themselves of the ED services.

The Resource Team is composed of residents of the communities whose task is to introduce and network the Facilitator into the community and share local knowledge that can input into solutions to solve problems encountered while helping clients. The Technical Advisor helps to train the Resource Team and assists the Management Team to define the role and composition of the Resource Team - a collection of 30-50 citizens who love their community, believe in private enterprise, and are willing to meet monthly to brainstorm solutions to entrepreneurial client problems. The Resource Team is diverse, representing the region in gender, culture, age, industry, service providers, professionals, home-makers, etc. The Technical Advisor assists in recruitment and the team must be trained. They are responsible for marketing the Facilitator into the community through a series of personal introductions and attending monthly meetings where brainstorming solutions and resources for entrepreneurs are collected. Commitment to meeting monthly for no more than one hour is key to creating a successful core group.

The program is promoted by the Resource Team who endeavour to introduce about 10 friends to the Facilitator during the first 90 days of operation. This leads to transfer of trust from the community members to the Facilitator. The program is very grassroots and very effective. Once an entrepreneur or business owner has been assisted, they are invited to tell their story to the media. At this time, your project will evolve to a new level of awareness and credibility in the community. This is the evidence that the Facilitator is competent and that the Resource Team works in complete confidence.

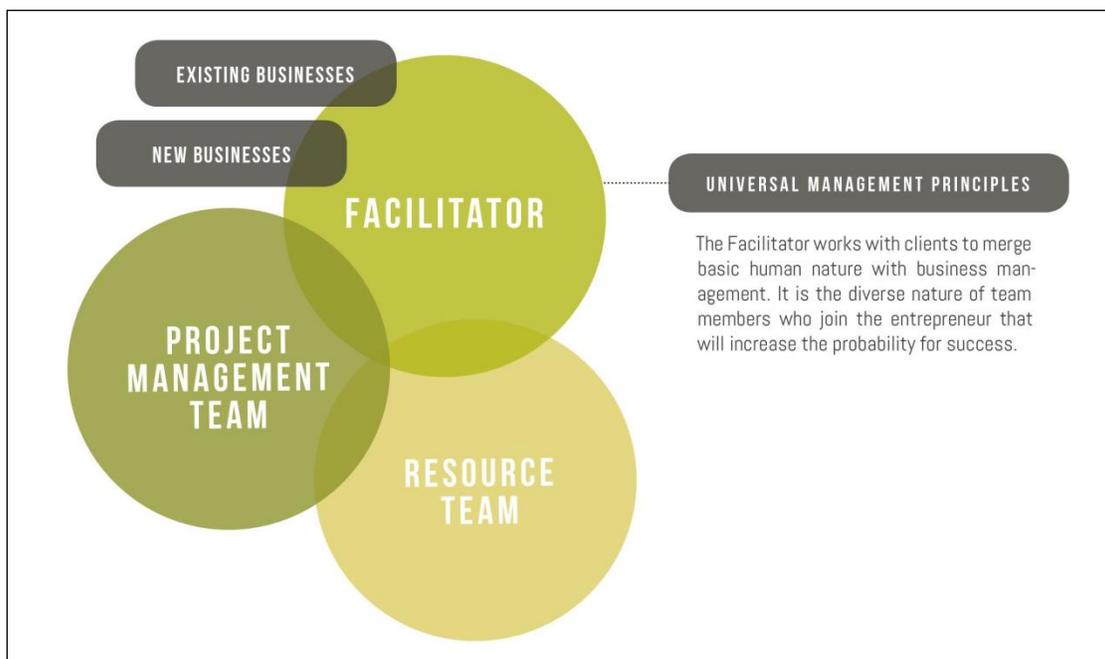


Figure 3. The triad of the ED program.

UNIVERSAL MANAGEMENT PRINCIPLES

To help people to succeed in business it is essential to share with them Universal Management Principles which include an understanding of the need for:

1. Core business management, and
- 2, External advisors.

In core business management it is impossible to be good at everything. Sometimes when we learn what it takes to become an entrepreneur, it also seems impossible since there are so many skill sets needed for success. These skills are known as the Universal Management Principles⁶ that recognizes human nature, and the need to build a team approach in creating a company. It begins with passion for producing something of value for society. It could be a **product** and/or service as simple as chocolate chip cookies.

The next skill is how to create a business around that product and the delivery of it to customers who want it. Costs and prices need to be taken into account since the creation of a successful business demands that a profit be made. **Financial Control** and accounting of the cash that flows in and out of the enterprise is essential in order to keep the business afloat over time. Finally, **Sales and Marketing** of the product requires a careful study of the marketplace to determine demand levels and fluctuations, what competition exists, how to enhance the product to make it more appealing, etc.

No single person has all of these skills nor can they manage these or have an interest in performing all of these essential tasks. So, a team approach is necessary to achieve success. Successful businesses result when individuals bring their unique skills together to deliver a beautiful product or service, create superb marketing, conduct rigorous financial management and provide strong leadership, the four pillars of success. This is at the very heart of the ED program in which the entrepreneur with a passion for delivering something of value can find the expertise from the Facilitator and the Resource Team to see that the finances and marketing aspects are covered.

Community involvement gives entrepreneurs access to an incredible network of external advisors. External advisors bring experience and advice and more importantly, an outside perspective. With a solid management team in place and external support and advice, the entrepreneur is better poised for success.

OUTCOMES

To initiate a program takes approximately three years, after which it will continue to operate without further need for training, although the Technical Advisor should return annually to monitor and evaluate the performance of the program. Based on past experience, the program should assist approximately 200 entrepreneurs per year depending on the size of the community. About 10 to 15 new businesses will start each year resulting in 40 to 60 new jobs. Existing businesses can access the service as well to improve their profitability and opportunity to grow. The skills acquired by the Facilitator and volunteers last in perpetuity.

The evaluation carried out annually by the Technical Advisor uses a number of important metrics to measure the performance of the program. Each community will define success differently. And each community's pre-conditions are unique. If there has been a negative business start circumstance, even one new business delivering three jobs may be a success in a small community. Some measures of success could be:

- Business starts
- Business expansions
- Jobs created and retained
- Households positivity impacted
- People no longer on social net /public assistance
- Hours contributed by Resource Team
- Community pride; well being
- Business failures averted
- New taxes
- Anticipated business revenue
- Capital purchases
- Increased demand on other services

PROGRAM FUNDING

Various one to three-day workshops are delivered on site to introduce citizens and practitioners to the approach. Insights are shared and tools are transferred. Individuals who have been involved in this type of community practice can share their experiences. The ED training program spans from 18 to 36 months. The ability to become effective in the role of Management Team, Facilitator or Resource Team increases steadily over time as more clients are successfully served. Many clients eventually join the Resource Team to feed back what they have accomplished and to share it with other new entrepreneurs.

Funding the program consists of two components: project implementation and operation. As well as actual money sources, in-kind contributions from people and operations such as cell-phones, computers, and training venue sites are welcomed. The **Project Implementation** portion of the budget is the amount paid to the Technical Advisor for training, materials, and services provided during the 18 to 36-month Apprenticeship period. The second portion is the operations budget which includes Facilitator fees and very modest administration costs. The **Operations** funding covers the ongoing salary and expenses of the Facilitator as well as modest on-going post-training and support fees to monitor and assess the performance.

Fees for the Technical Advisor are determined on a case by case basis. The Technical Advisor works with the Management Team to identify funding partners and develop other strategies to engage a broad and appropriate cross-section of stakeholders that can benefit from a more diversified and thriving local economy.

After the training period is finished, the on-going expenses consist of the salary for the Facilitator and some modest costs for phone, travel, and meetings. A modest amount is also required for an annual review by the Technical Advisor. It should be noted that the estimated annual value of citizen engagement is \$48,000 based on (\$50.00/hour x 2 hours/month x 40 citizens x 12 months) in volunteer contributions.

CASE STUDY IN MINING – PEAK GOLD

This case study illustrates why it is so important that planning for mine closure by governments, local governments and communities, and mining companies begins during the initial mine planning phase and must cover not just the rehabilitation plan, but also the socio-economic impacts of the mine closing. The management team at Peak Gold in Cobar, Australia decided to approach their community closure plan from a different angle than the usual top-down approach. The company supported the grassroots approach to foster local economic diversification. The

community members were at the center of the process which, in addition to promoting community engagement, helped create a strong sense of ownership. When the community enjoys some social capital and is given the right tools to build capacity, it is natural to develop long-lasting successful projects. In Cobar, following the implementation of the ED model in 2009, the town opened 43 new businesses, providing 90 new jobs, generating over \$C2.5 million in gross sales and re-investing almost \$C780,000 into the community.⁷

The mine came into production in 1992 and in 2008 achieved a milestone, producing its two millionth ounce of gold since commissioning. Peak Gold Mining has a finite life span with ongoing exploration activities seeking to grow reserves. The mine is located within the Cobar Shire mining district approximately 600 km northwest of Sydney and eight kilometers south of the town of Cobar in New South Wales (NSW), Australia. The community of Cobar Shire comprises a population of about 5,120 people and its economy is built around the mineral extraction activities in the region as well as pastoral activities.

CONCLUSIONS

The socio-economic dynamic of mine closure must be assessed and a plan initiated early on during the project development phase. By starting the development of secondary enterprises early, the economic base can be diversified. If a region heavily depends on mining for its economy, closure options for a site will be of prime importance. On the other hand, a region that has a more diversified base may place less importance on a mine closing since other industries will lessen the impact of closure. Mine projects planned together with locals can create a positive relationship as well as an economically-sustainable community once the external support from the mine is withdrawn. Creating a stable plan for economic diversification following closure includes capacity building and ownership of development plans within the community.

On their own, mining companies do not have the capacity or knowledge to assist non-mining businesses in mining communities post-closure. There is a need for greater synergies between mining companies and governments through formal relationships that match the social and economic plans of a mining company with the social and economic plans of the local community and region, with a focus on employment options post-mining.⁸ Building trust and strong relationships between all stakeholders is important and having a third party technical advisor can facilitate the process. This collaboration focuses on creating a long-lasting bottom-up economic development model through capacity building and stable long-lasting projects. Finally, the ED model helps local communities take ownership of the community development and become less dependent on the financial resources of mining companies and out-lasting the life of the mine.

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