

IGNITING INNOVATION A THOUGHT LEADERS STRATEGY FORUM

CONVENED BY THE LEMELSON FOUNDATION

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THE HEATHMAN HOTEL, PORTLAND, OREGON



MEETING REPORT

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THE LEMELSON FOUNDATION
improving lives through invention

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FOREWORD

A growing number of nonprofit and for-profit organizations are implementing a new approach to international development. Rather than an aid-driven approach through which grants and loans are made to governments and large institutions in the developing world, these organizations are pursuing an entrepreneurial approach. In this approach, new technologies are invented or existing technologies adapted to suit the specific requirements of poor people. In many cases, these technologies are bought directly by poor people to form the basis of income-generating enterprises; in other cases, they help people meet their basic human needs. Oftentimes, they fulfill both of these requirements.

In order to enhance the collaboration of funders and heighten the impact of technology-based social enterprises dedicated to improving the lives of poor people, The Lemelson Foundation convened a forum of “Thought Leaders” in Portland, Oregon, on October 6, 2005. The meeting participants included leaders from social enterprises in the developing world and funders, including representatives of foundations, venture-capital advisory firms and banks. The Foundation sought to create a setting that was intimate and informal to give space for reflecting and connecting.

The meeting sought to:

- Learn from challenges encountered by social entrepreneurs;
- Identify appropriate financial and nonfinancial assistance to expand successful social enterprises; and
- Define a common learning and action agenda.

Entrepreneurs led round-table discussions, using their stories as case studies. They highlighted the difficulty of getting started, and securing financial resources, mentoring support and networks. They revealed lessons learned from failures and shared best practices on impact assessment and replication of successful models.

Participants identified how limited resources could be leveraged for greater impact. They recommended creating partnerships between foundations, investors and social enterprises to mobilize resources. In particular, they discussed using grant funds to leverage loan and equity funds by creating “first-lost cushions” or loan guarantees. Participants highlighted the important role of philanthropic resources in supporting market-development costs for new technologies targeted to poorer segments of society.

Much of the day focused on the significance of nonfinancial resources. Social entrepreneurs affirmed the need for greater access to networks and knowledge. Despite leaps in communications technologies, direct mentoring support is elusive. In addition, information continues to be a barrier to transactions. Both investors and social entrepreneurs highlighted the need to improve the availability and reliability of information that underpins investment decisions. Standards and tools must be created for collecting data on the social outcomes and financial returns of the enterprises.

Ultimately, participants created a list of collaborative opportunities and committed to work together on specific projects. The Lemelson Foundation was grateful for the engagement and collaboration of this community and looks forward to continued dialogue—and action.

*Julia Novy-Hildesley
Executive Director
The Lemelson Foundation*

MEETING SUMMARY

On October 6, 2005, The Lemelson Foundation convened a meeting of thought leaders in Portland, Oregon, to identify how best to support the growth of innovative, technology-based social enterprises that engage the world's poorest people to productively meet their own needs and create their own wealth. This one-day forum was attended by leading social entrepreneurs, venture capitalists, and philanthropists from around the world. (See Appendix B for detailed participant list.)

Using the experiences of the entrepreneurs in attendance, the participants explored the roles of financing, nonfinancial assistance, and knowledge management throughout the innovation process. They identified resource needs and availability, key success factors, and opportunities to grow innovation.

Participants identified the most significant financial challenges, including:

- Access to front-end, high-risk investments;
- Communication between investors and entrepreneurs;
- Financing that supports social impact; and
- Market-development financing.

To address these challenges, participants suggested they build an investor network to pool different types of resources available at various stages. Collaborative investments could limit the risk for individual investors and increase efficiencies in shared due diligence, transaction costs, monitoring, and well-structured access to human and financial capital for entrepreneurs. Enhanced communication and networking could occur via in-country investment forums held throughout the developing world, and a technology platform connecting social entrepreneurs with financial resources. To maintain a focus on social impact throughout the innovation process, participants identified a research opportunity to develop a better understanding of various financing options and their long-term social impact. And finally, as market-development costs are significant for social entrepreneurs, participants recognized the opportunity to improve the visibility of such costs and map the working capital available at each stage, noting investors who would accept return as the market develops.

The following were identified as priorities to support innovation with nonfinancial assistance and knowledge management:

- Enhanced communication between investors and entrepreneurs;
- Tracking mechanisms for impact measurement;
- Nonfinancial technical assistance for entrepreneurs;
- Case studies of successes and failures;
- Informal support networks up front; and
- A library of resources.

Opportunities to address nonfinancial and knowledge management challenges include improved tracking of social and economic impact and enhanced communication via a technology platform that would match entrepreneurs with financial resources. In addition, it was noted that foundations have the opportunity to provide informal support networks to the entrepreneurs up front and to pool resources to provide customized training and assistance as needed by the entrepreneurs. Others noted that information-sharing and learning could be enhanced via improved documentation of social-enterprise successes and failures as well as through the development of a collective resource library for the group.

At the close of the meeting, the participants committed to a number of specific actions, including:

- Building a network for collaborative investment activity;
- Compiling a library of resources;
- Improving tracking and prediction of social and economic impact;
- Creating an incubation pathway/roadmap identifying financial and nonfinancial resources needed at each stage; and
- Developing a technology forum to match resources.

Participants agreed that in order to advance development, and gain the maximum social return, experimentation in funding mechanisms is crucial. Several participants will be establishing a network to pool grants, loans and equity. They also acknowledged a need to create an incubation pathway, or roadmap, to identify financial and nonfinancial resources needed at each stage, recognizing there are significant “trailblazing” requirements for social entrepreneurs. They agreed to join forces to create a technological platform, matching entrepreneurs with investors and advisors. They will also create measurement tools to better predict and analyze the total social impact of technological innovations. These actions will support the growth of social enterprises around the world, to help the world's poorest people meet their needs and create wealth.

For a detailed discussion of these actions, please see action items in the “Wrap-up” section beginning on **page 22**.

INTRODUCTION

Background

The Lemelson Foundation celebrates and supports inventors and entrepreneurs in order to strengthen social and economic life.

Understanding that invention and innovation play a critical role in improving living standards in many nations, the Foundation recently began a program designed to help address the challenges facing the nearly three billion people trapped in poverty in less-industrialized countries. The Foundation's *Invention for Sustainable Development* program recognizes inventors and innovators in developing countries, fosters the institutions that support them, and applies their inventions to meet basic human needs and advance sustainable development. To achieve these goals, the Foundation is committed to exploring avenues of collaboration with other funders, the private sector, governments, and nongovernmental organizations.

On October 6, 2005, The Lemelson Foundation convened a meeting of thought leaders in Portland, Oregon, to identify how best to support the growth of innovative, technology-based social enterprises that engage the world's poorest people to productively meet their own needs and create their own wealth. Invitees represented foundations, investor groups, and social enterprises from around the world (see Appendix B: Participant List and Appendix C: Participant Biographies).

The participants were interviewed prior to the meeting, where they shared their challenges, lessons, and models, and thus helped to shape the meeting's purpose and agenda. At the meeting, the participants sought to learn from each other's experiences to facilitate future innovation. The workshop objectives were designed to address the areas that could lead to specific actions.

Meeting Objectives

To meet the purpose of the workshop, objectives focused on how to support the growth of social enterprises in the areas of financing, nonfinancial assistance, and knowledge management:

1. **Explore the roles of financing, nonfinancial assistance, and knowledge management, from idea to impact.** The Lemelson Foundation created a process map identifying the various stages of technological innovation from idea to impact (see Appendix D: Idea-to-Impact Process). Understanding the needs and challenges entrepreneurs face at each stage in the process would allow the participants to identify strategies or mechanisms of building partnerships that would bring a variety of resources, including financing, human resources and organizational capacity building, and new ideas.
2. **Identify key insights and success factors for supporting technological innovation.** Using the cases of the social entrepreneurs and experiences of the participants, the participants would identify key success factors to facilitate future innovation for sustainable development.
3. **Identify and commit to pursuing a few key opportunities for action.** This would entail articulating some of the outcomes that were sought to advance innovation, and identifying the players willing to lead the change.

Igniting Innovation: A Thought Leaders Strategy Forum

Purpose

To identify how best to support the growth of innovative, technology-based social enterprises that engage the world's poorest people to productively meet their own needs and create their own wealth.

Objectives

1. Explore the roles of financing, nonfinancial assistance and knowledge management, from idea to impact.
2. Identify key insights and success factors.
3. Identify and commit to pursuing a few key opportunities for action.

The participants' hopes and expectations for the meeting included such things as developing and strengthening partnerships, identifying innovative financing methods, and facilitating transactions. (See sidebar for details.)

Agenda

Participants used the Idea-to-Impact process as a guiding framework as they engaged in a series of small group discussions. To keep the discussions grounded in the entrepreneurs' reality, each small group was led by one or two of the following social enterprises:

- Grameen Phone;
- International Development Enterprise (IDE-India);
- KickStart;
- Program for Appropriate Technology in Health (PATH);
- Project Impact; and
- Solar Electric Light Company (SELCO).

The first discussion focused on hearing the entrepreneurs' stories and learning about their innovations, challenges, lessons learned, and enterprise sustainability. The groups then explored key issues regarding the role of financing in supporting the growth of innovation. Finally, they turned their attention to the role of nonfinancial assistance and knowledge management. The participants reconvened to consider all of the opportunities that were identified throughout the day to spread social innovation. The resulting action agenda was built, and the participants joined forces to work on common goals.

A detailed agenda is presented in Appendix A. The following sections present the essential details of each agenda item.

Teleconference with the Bellagio Forum Participants

The Bellagio Forum for Sustainable Development Conference, in Germany, took place immediately prior to The Lemelson Foundation workshop and focused on the issue of how foundations manage their assets. Topics included venture philanthropy, unique business and screening models, mission-and program-related investment, and shareholder activism. At the close of the Bellagio Forum conference and the opening of The Lemelson Foundation workshop, participants discussed possibilities for coordination. All agreed to share key findings and opportunities from both workshops and move forward on specific action items.

Framing the Day

Julia Novy-Hildesley, Executive Director of The Lemelson Foundation, welcomed the participants and invited them to share their diverse experiences and ideas throughout the day. She explained the purpose of the meeting and the four areas the group would focus on to support the growth of innovative, technology-based social enterprises:

1. Hearing from the entrepreneurs regarding their experience in making this happen;
2. Financing needs, availability, and opportunities;
3. Nonfinancial needs, assistance, and opportunities;
4. Knowledge-management requirements and opportunities.

Participant Hopes and Expectations for the Workshop

Partnerships:

- Strengthen partnerships.
- Identify concrete steps to implement.
- Reinforce each other continuously.
- Facilitate deal flow.

Enterprise:

- Spur social innovations.
- Identify key capacities and circumstances needed to scale successfully.

Capital:

- Infuse capacity and capital
- Breakthrough to get capital to entrepreneurs.
- Create processes to drive capital to the bottom of the pyramid.
- Learn about innovative financing.
- Find investment opportunities
- Coordinate co-investment and find complementary resources.

Impact:

- Impact adolescent girls in developing countries.
- Learn about specific projects and other models; avoid making the same mistakes.

Ms. Novy-Hildesley expressed her desire to develop a learning agenda in the field by identifying who the players are and how they can work together. She also encouraged the meeting participants to identify specific areas they could take to move the action agenda forward. Participants then introduced themselves and shared their individual hopes and expectations for the day.

Douglas Steinberg, Senior Program Officer with The Lemelson Foundation, introduced the Idea-to-Impact process that would frame the conversations throughout the day, and reported the feedback he received from participants prior to the meeting (see Appendix D: Idea to Impact Process). The Idea-to-Impact process map includes the following stages: conception, prototype, creating a business, market-development, distribution, and scaling up. It was presented as being an iterative process affected by societal context, enabling factors, and availability of financing. Mr. Steinberg suggested that, because every case is unique, funders and investors are challenged to target their involvement strategically and maximize the impact of investment.

Mr. Steinberg also described the “5R” framework (developed by Dees et al.) that could be used to assess the scalability of innovations, by evaluating their readiness, receptivity, resources, risks, and returns.¹ Expanding on this framework, he presented various models used by the entrepreneurs in the room to scale up, such as: designing for affordability, focusing on partnerships, and franchising. He shared one of the critical challenges faced by the entrepreneurs — funding the market-development phase. Market-development costs for social enterprises often extend beyond the investment horizon of a typical business venture (before making a return on their investment), taking up to a reported 80% of the Idea-to-Impact process. In response to this challenge, he suggested options that innovative social entrepreneurs could explore, including:

- Forming separate arms (for-profit or nonprofit) to serve complementary needs, raise a revenue stream separate from grants. May be constrained by local laws governing nonprofits.
- Creating a funding constituency — must be integrated into business plan from the beginning. Philanthropy may be appropriate for recurrent costs for social operations or capacity building (cf. GEXSI’s Social Bill).

Mr. Steinberg shared the feedback he received from participants regarding nonfinancial needs. Enterprise performance challenges exist in the areas of governance, human capital, financial performance, management quality, and positioning for the future. He noted that entrepreneurs were concerned about access to necessary information for strategic decision-making while investors tended to be concerned about the transparency and accessibility of reliable information to assess the risks involved in potential investments. As a final point, he informed the participants that all had mentioned concern about effectively measuring societal impacts.

“There is a need for a new ecosystem or paradigm to create the presently nonexistent marketplace for social investing. This meeting is a good starting point for coalescing thought leaders to hopefully continue the dialogue and create collaborations to bring this intelligent deal-making space into existence.”

*David Green
Executive Director
Project Impact*

¹ Dees, J. Gregory, Beth Battle Anderson, and Jane Wei-Skillern. “Scaling Social Impact: Strategies for Spreading Social Innovation.” *Stanford Social Innovation Review*. Spring 2004, pp. 24-32.

PROFILES OF SELECTED SOCIAL ENTERPRISES

GrameenPhone: Village Phone Program²

Conception

With mobile telecommunications successfully established and generating huge profits in developed countries, it was just a question of how to adapt the technology to the developing countries. But it took vision and a leap of faith to put the cell phone in the hands of women entrepreneurs in rural Bangladesh. The driving force was entrepreneur Iqbal Z. Quadir, but success was only possible through creative partnerships, and a model that adhered to basic business principles — the profit motive.

GrameenPhone grew from the idea that in Quadir's words, that "connectivity is productivity — be it in the modern office or an underdeveloped village." In fact, the cost of obtaining valuable information is often unimaginably greater in developing countries than in industrialized countries. For example, a farmer could save himself an entire day walking to the nearest town if only he could make a simple phone call — if only he had access to the network. The solution was to make sure that the new cell phone networks in Bangladesh provided service to rural areas — and to harness the entrepreneurial energies of the poor women in these rural communities.



Incubation

The challenge to establishing a rural cell phone network in Bangladesh was to attract investors.

Private enterprise in Bangladesh can easily be viewed as risky investment — especially one that targets the poorest segment of a poor country. The establishment of a telephone network requires a huge investment in infrastructure. While it seemed feasible to build coverage of rural areas into the network that linked the urban markets, it would still require an initial investment of \$125 million. Quadir began his quest by securing investment in his start-up, Gonofone. Through much work and a meeting of minds, Gonofone leveraged additional support from the Grameen Bank, which established GrameenPhone, as well as international partners.³

The strategy was to turn Bangladesh's development challenges into opportunities: Poor telecommunications provided a prime opportunity for leap-frogging to wireless technology. The low coverage meant that the market was far from being saturated, and promised much future return to the investor. And rather than focus on the low buying power of rural Bangladesh, the enterprise focused on wealth creation through connectivity, which could then be tapped to pay for phone service. Grameen Bank already had an extensive credit network, providing small loans to rural women to invest in productive assets, to be reimbursed from future earnings. Grameen Bank presented a perfect partner in the cell phone venture.

Starting in a limited area of 500 villages (out of over 68,000 nationwide), the enterprise quickly proved successful. The consortium was able to leverage loans from the International Finance Corporation (IFC), the Asian Development Bank, the Norwegian Agency for Development (NORAD) and others.

Market-Development

The program enables women borrowers of Grameen Bank to obtain mobile phone technology. The loan usually is for 12,000 takas (about \$200) and pays for a handset, subscription and incidental expenses. The Village Phone (VP) operator receives training from Grameen Telecom, and she works as an owner-operated pay-phone.

² For more information see: www.grameenphone.com, www.telecommons.com/villagephone/quadir.html and Friedman, Thomas L. *The Lexus and the Olive Tree*. New York: Farrar, Straus and Giroux, 2000, pp 359-362.

³ Partners in the original consortium included Gonofone (4.5%), Grameen Telecom (35%), Telenor Mobile Communications AS (51%) and Marubeni Corp (9.5%). Gonofone has since sold its interest.

The service provides the rural poor with access to telecommunications, provides rural women with income-generating opportunities, enhancing their social status in their homes and communities.

Expansion

Initiated in 1997, the Village Phone program has continued to grow at a robust pace over the years. As of August 2005, there are more than 165,000 VP subscribers (not counting urban customers). The Village Phones in operation now provide access to telecommunications facilities for more than 60 million people living in rural areas of Bangladesh. The revenue growth has been significant over the years. Beginning with 530,000 takas (under \$10,000) in 1997, the figure rose to over 6 billion takas (over \$100 million) by the end of 2004.

Rural cell phone entrepreneurs earn up to \$2 a day after expenses. The \$700 a year net income is two to three times the average income in Bangladesh. Women who used to play marginal roles in their communities now play a pivotal role, as both poor and well-to-do come to them to use the phones. Access to telecommunications has provided emergency medical and veterinary assistance, helped farmers decide when and where to sell crops, and linked families to their members who have traveled.

Having demonstrated that a healthy profit can be obtained by providing quality services to the rural poor, Quadir has moved on to investigate other services, such as supplying energy to villages off the grid (which includes most villages). The core of his strategy is to build the service around rural entrepreneurs who derive incomes, while providing a much-needed service to their communities.

International Development Enterprises-India (IDE-India): Micro-Irrigation Kits⁴

Conception

Drip irrigation technology has been around for a while, but it has been prohibitively expensive for poor farmers — costing as much as \$2,000 per hectare. For a farmer living on a dollar a day, who may eke out a livelihood on perhaps a half hectare of land, this investment is beyond his wildest imagination. As a result of their countless discussions with farmers, and visits to various states in India, IDE-India asked, “Why not just let the water dribble out of small holes in the pipe, instead of using pressure-compensating drippers? Would using a smaller hose and much smaller tank dramatically reduce the cost?”

In developing the solution, IDE-India stuck to its mantra, “the relentless pursuit of affordability.” IDE-India designs products with a view to reducing costs in order to make their products accessible to the poorest farmers. One product, the micro-irrigation kit, is a drip system that economizes on water — but it is also within the reach of the poorest farmers.

Incubation

Through a process of trial and error, IDE-India focused its design on reducing costs in each of the critical components. This entailed much technical work to find the appropriate hose materials, experimenting with hole size, water pressure, and filters. But the critical feature of the product development was ensuring input and feedback from small farmers. This included fitting farmer preferences for tubing materials or micro-tube lengths into the product design, but it also helped IDE-India anticipate social outcomes, such as land disputes, that might arise from the introduction of the new technology.



⁴ For a description of IDEI's work on treadle pumps, see also : http://www.seepnetwork.org/files/3131_file_IGPBDS_Case_Study_4_Margaux.Jennifer_.pdf

Market-Development

The product that has been developed for the Indian market has been adapted to the specific area in which it will be marketed. This is necessary due to the highly variable nature of agriculture in India — taking into account humidity and soil types, crops, and cropping patterns. The basic package is a low-cost product that can irrigate 20 square meters² — enough for a kitchen garden. As farmers begin making money from their small plots, they can add kits to increase the area under irrigation, or purchase better-quality (more durable) micro-irrigation kits. This means that every farmer can obtain a micro-irrigation kit suited to his or her situation.

Market-development has been conducted through a variety of outreach activities, including demonstrations on farms and at fairs. IDE-India uses a variety of media, including brochures, videos and word-of-mouth. They community leaders as early adopters, and then rely on these people to advise other farmers that drip irrigation is a worthwhile investment.

Expansion

IDE-India works with local manufacturers to produce the micro-irrigation kits locally, and at the lowest cost possible. It trains retail distributors, and establishes partnerships with other agencies to provide complementary services, such as agricultural extension services, for those who adopt new crops. Finally IDE-India works out purchasing arrangements for food processors to purchase the new crops at prices attractive to farmers. It can take three to five years to develop these market components, and until completed, the distribution system is not sustainable. Cost for IDE-India's work is not recovered in the market-based distribution — this constitutes a market-development cost that must be supported through grants or “smart subsidies.”

IDE-India's distribution system includes a customer warranty that also enables IDE-India to track end users and monitor the impact on their household incomes. In Tamil Nadu and Madhya Pradesh states in 2005, some 3,000 farmers adopted micro-irrigation and netted collectively about \$200,000 in their first year.

KickStart: MoneyMaker Treadle Pump⁵

Conception

Around three-quarters of Africa's poor live in rural areas and engage in farming. To raise these families out of poverty, solutions must focus on making farming more profitable. Martin Fisher and Nick Moon of KickStart spent years working on “appropriate technology” projects before understanding that the key factor to success would be to help farmers earn more money. With more income, families would be able to resolve other poverty-related problems, such as poor health and education. After spending considerable time trying to understand the challenges faced by farmers, Nick and Martin, in partnership with Kenyan engineers, adapted an existing technology to create a low-cost, foot-powered treadle pump. Their vision was to enable farmers to diversify their crops, harvest more than once per year, and over time, obtain more land and expand their farm-based businesses.

Incubation

KickStart faced many challenges at the incubation stage. The organization had to adapt its model, which was originally developed for South Asia, to the local context in Africa. For example, they had to refine the prototype to address the fact that many farmers would operate the technology with bare feet. They also had to build the capacity of poorly skilled local manufacturers through training and provision of tools used for mass production of high-quality products. Throughout the product-development process, KickStart always advocated for quality engineering,



⁵ See: www.kickstart.org. KickStart was formerly known as ApproTEC.

which would ensure a high-quality product at low cost. No matter how poor, the customer deserves nothing less. Here, quality meant simplicity, portability, and easy maintenance without tools or spare parts.

Market-Development

KickStart developed creative marketing strategies to cultivate demand among dispersed and often illiterate farmers. They demonstrated the technology in villages on the back of pickup trucks and conducted “speed-pumping” contests at local fairs. They built a reliable supply chain by ensuring the availability of spare parts and convincing wholesalers and retailers to sell the technology. They trained retailers to handle simple repairs, show farmers how to use the technology, and fill out warranty forms for their often illiterate customers. These warranties allowed KickStart to track the location of every pump it sold and conduct random-sample longitudinal evaluations of the impact of the technology on farmers’ incomes.

Expansion

Adopters of the MoneyMaker treadle pump have started some 37,000-family farm enterprises in Kenya. Their net annual profits total \$38 million a year — or 0.5% of Kenya’s GDP. (This is comparable to Microsoft’s share of the U.S. economy.) KickStart’s ability to measure this impact, primarily through the product-warranty system, has certainly contributed to the organization’s growth. Probably more important, however, is that the end user derives rapid and significant benefits.

KickStart has expanded to Tanzania by raising philanthropic capital to fund necessary design changes to the pump to suit its new market, build capacity among local manufacturers, and do extensive marketing. Crossing from early adopters to the mainstream requires different marketing strategies: risk takers may buy a product after word-of-mouth contact, but the mainstream wants to see the proof. Developing this market requires subsidies, but KickStart estimates that once 20% of the market potential has been reached, the subsidies can end — a process that can take five to twelve years. KickStart’s plans to expand into other African countries will rely on centralized production of the treadle pump in China, where costs can be minimized and quality will be consistently high. This will enable KickStart to concentrate on developing markets and distribution networks, but it will require further investment for the manufacturing in China.

Program for Appropriate Technology in Health (PATH): Uniject™ Auto-disable Injection Device⁶

Conception

What if syringes were so easy to use that even untrained health workers could give injections without the risk of error? What if vaccines for developing countries could be prepackaged in low-cost, pre-filled syringes, vastly reducing the amount of vaccine wasted? What if syringes used for immunization could not be reused — making certain that the gateway to HIV transmission was closed?

The Uniject™ auto-disable injection device, born in the Seattle shop of PATH, appears little more than a small bubble of plastic attached to a needle, but it answers all these needs. It is so simple to use that health workers can learn to use it after less than two hours of training. It cannot be reused, eliminating one route of disease transmission. And it is precisely pre-filled by the vaccine producer with a single dose, which ensures that the correct amount of vaccine is delivered and that none is discarded unnecessarily. Vaccinators never have to choose between immunizing the five children standing before them today — wasting the rest of the vaccine in a multi-dose vial — and immunizing ten children who may need vaccine tomorrow.



⁶ Adapted from: <http://www.path.org/projects/uniject.php>. Uniject™ is a trademark of BD.

Incubation

Working in labs and product-development workshops at its headquarters in Seattle, PATH develops prototypes that meet basic criteria. The product-development team grapples with design challenges ranging from materials to product performance. All along the way, PATH consults with people in the field — policy makers at multi-lateral agencies such as the World Health Organization, as well as users such as nurses or patients. With better understanding from stakeholder feedback, the PATH team returns to the lab to refine the product. Over the years, PATH may generate several versions — each one better than its predecessor. It also keeps careful product-development logs, and maintains some property rights in order to negotiate with manufacturers conditions that would help to assure access, availability and affordability of the products in developing world health-care programs.

Funding for this stage of dissemination generally depends on institutional donors, including government or multi-lateral agencies and foundations. For certain products, the process can be quite arduous, including several levels of clinical testing to obtain regulatory approvals. Different donors may be interested in supporting the product development at different stages, from early R&D through testing and distribution. It is rare to find one single donor that will support the entire product development. As the product moves closer to marketing, however, the private sector will take a greater interest, including investing in the cost of later-stage clinical testing for promising products.

Market-Development

PATH developed the Uniject™ device with funding from the U.S. Agency for International Development and then licensed the device to BD, the largest syringe manufacturer in the world. As part of the licensing agreement, BD supplies Uniject™ devices to vaccine and pharmaceutical producers at preferential prices for use in developing-country programs.

Developing the Uniject™ device and bringing it to market has been a 20-year endeavor that crossed and re-crossed the boundary between the public and private sectors.

Expansion

Two of the greatest successes of the Uniject™ device have been with tetanus toxoid and hepatitis B vaccines. The hepatitis B virus is 50 to 100 times more infectious than HIV. Most people in developing countries are infected during childhood, and it is childhood infections that are most likely to lead to significant liver disease. In 2003, for the first time, Indonesia launched an immunization program to give every newborn in the country a lifesaving first dose of hepatitis B vaccine. Uniject™ devices, often in the hands of midwives stationed far from hospitals and health care centers, played a large part. The success of the device in Indonesia will be transferred to other nations where physical or cultural barriers stand between newborns and important immunizations. In addition, UNICEF has used the Uniject™ device in campaigns that delivered nine million doses of tetanus toxoid vaccine to women in Mali, Afghanistan, Ghana, Somalia, Sudan, and Burkina Faso. PATH is also working on additional uses for the Uniject™ device, including administration of the antibiotic gentamicin to treat neonatal sepsis or to bring injectable contraceptives to women far from a clinic.

Solar Electric Light Company (SELCO): Affordable Solar Energy⁷

Conception

Harish Hande of SELCO spent two and a half years living in a rural Indian village without electricity, considering the opportunities that lighting would bring, and

⁷ See: www.selco-india.com.

understanding the specific requirements of poor families. He saved money and borrowed \$500 from family to buy and customize his first solar lighting unit to the needs of poor people. His vision was to enable poor people to access appropriate and affordable lighting.

Incubation

SELCO lacked investment capital, so Harish Hande proved his concept by purchasing and adapting one solar lighting unit at a time, selling it and reinvesting the money to build another unit. Hande did this 500 times over three years with his initial investment until he was able to access a loan for one million dollars from the International Finance Corporation, which enabled him to produce enough units to sell at a larger scale. During the incubation stage, Hande also lacked technical and business advice. He says with greater access to mentors and lessons from other entrepreneurs, SELCO's incubation phase could have been much shorter.

Market-Development

After securing \$1.1 million in an initial equity investment, SELCO began investing in building a market for solar lighting technology. Thirteen investors, including wealthy individuals, social-venture capitalists and social-venture funds from Europe, put money into a U.S.-based entity, which reinvested the funds in SELCO India. The investors expected an annual return of 4% to 5%, and to exit within seven years by selling their shares to incoming investors.

To build the market, SELCO has held training programs to convince local Indian bank loan officers to lend to people interested in acquiring solar lighting and to manufacturers interested in producing the products. Five thousand rural bankers have received training from SELCO and learned about the technology's cost-competitiveness against alternatives and the income streams resulting from access to solar lighting that would enable borrowers to pay back their loans. SELCO created separate long-term, low-interest loan funds to cover down payments and to provide affordable interest rates for borrowers. This resulted in a viable business model but reduced the funds SELCO could use for manufacturing, distribution, and sales, hence slowing its growth and profits.

Expansion

SELCO has used equity investments and loans to expand from Karnataka to other states in India. Partnerships with self-help groups and micro-finance institutions have facilitated its expansion. In Gujarat state, for example, SELCO works with SEWA Bank, a self-employed women's association with 500,000 members. SELCO plans to market to SEWA's network of women and engage them both as end users who will purchase the technology directly and as micro-entrepreneurs who will launch small solar-lighting and other energy-service businesses. SEWA has agreed to provide loans to end users, including street market vendors and home-based workers, and will offer training in business development and loans to interested entrepreneurs.

SELCO is in the early stages of expansion, and it is exploring how to access greater resources and new types of capital. For SELCO, existing equity investors are looking for an opportunity to exit; SELCO will need a second round of investors soon. They are also seeking to secure philanthropic investments for the first time, to cover market-development costs, so that returns to equity investors can be higher.



DISCUSSION 1: HEARING FROM THE ENTREPRENEURS

GrameenPhone: Iqbal Quadir, Founder

*By bringing electronic connectivity to rural Bangladesh, GrameenPhone is delivering the digital revolution to the doorsteps of the poor and unconnected. By being able to connect to urban areas or even to foreign countries, a whole new world of opportunity is opening up for the villagers in Bangladesh. Grameen Bank borrowers who provide the services are uplifting themselves economically through a new means of income generation while at the same time providing valuable phone service to their fellow villagers. The telephone is a weapon against poverty.*⁸

GrameenPhone's main innovation is in the distribution of cellular technology. To deliver telephones to rural villages in Bangladesh, GrameenPhone knew they needed the right partners. By working with Grameen Bank, they had access to rural resources and were able to gain credibility via connection to a trusted financial institution. Building GrameenPhone's credibility and partnerships was a step-by-step process, as the bank and telephone company were afraid there was no market for cellular phones. Iqbal Quadir noted that "every layer of credibility is like winding an onion" — one must build the layers versus peel the layers. This required constant project organization and consensus building to make sure the team was aligned. Partnerships, credibility, the right business model, and consumer demand contribute to sustainability for GrameenPhone. GrameenPhone's advantage was to introduce an existing technology into a new market — with the added dimension of social value, by placing the cell phones into the hands of rural women. The particular challenge of early-stage funding required significant sweat equity from the company's founders.

Questions Addressed by the Entrepreneurs

Innovations: What were the most significant innovations that you developed to accomplish your goals at each stage of the idea-to-impact framework?

Lessons Learned and Challenges: What were the greatest challenges you faced at each stage, and how did you overcome them? What were the greatest lessons you learned as you took your project through each stage from idea to impact?

Sustainability: What contributed to the sustainability of the enterprise?

International Development Enterprises, India (IDE-INDIA): Amitabha Sadangi, CEO

*In the last 15 years, IDE-India has demonstrated its commitment towards alleviating hunger and poverty in India through identifying, developing, and disseminating low-cost irrigation technologies to over 500,000 smallholder farmers in India. IDE-India has successfully established that low-cost microirrigation technologies make a significant contribution towards improving agricultural production and thus the livelihood of the poor in rural areas. IDE-India's rural marketing campaigns raise awareness and create demand for these income-generating products. Private-sector enterprises are equipped to produce and distribute the products at an affordable, unsubsidized price.*⁹

The IDE-India model involves applying commercial business principles in its path of socio-economic development as a tool to development and sustainability of programs. IDE-India designs affordable technology to allow poor people to get a foot on the ladder. They also employ innovative marketing techniques to generate awareness of their products among farmers. A key challenge for IDE-India was that 80% of total investment costs were allocated to creating the market and supply systems. IDE-India's sustainability stems from creating a strong and continuing demand for the technology and motivating and nurturing an effective private-sector supply chain. IDE-India also works to establish partnerships and alliances to extend the technology, as well as provide support services to enhance the technology's impact, such as agricultural extension, or agreements with crop-processing businesses to buy new crops.

⁸ Taken from Grameen Phone website, October 14, 2005. www.grameenphone.com

⁹ For more about IDE-India, see www.ide-india.org, Workshop Organizational profile.

KickStart: Martin Fisher, Executive Director and Co-founder

KickStart helps create thousands of profitable small businesses in developing countries. Whereas other organizations work to provide social services to alleviate the effects of poverty — hunger, disease, squalor — KickStart works to remove the root cause: lack of income. KickStart designs and mass-markets low-cost capital equipment that is purchased by poor entrepreneurs. They use it to start businesses that greatly enhance the productivity of their primary assets — land, labor, entrepreneurial drive. Founded in Kenya in 1991, KickStart is a nonprofit organization with an annual budget of \$2 million, and 75 employees in Kenya, Tanzania and the USA.¹⁰

KickStart focuses on removing the root cause of poverty via small-business development. KickStart products promise quick (i.e., six months or less) return on investment to the consumer, as well as significant increase in household income over the long run. KickStart has been challenged, however, to find funders and investors to support the development of their market and supply systems, which amount to 80% of the total costs for product dissemination. The impact is impressive: economic returns are nearly 20 to 1. (That is, for every \$1,000 donated to KickStart today, local entrepreneurs and their employees will make over \$20,000 in new profits and wages in the next four years.) KickStart firmly believes that any social enterprise must be able to demonstrate impact that can be measured and proven. KickStart also employs the “walk-away” test of sustainability: its work is considered successful when the organization can walk away and leave a thriving business sector behind.

PROJECT IMPACT: David Green, Executive Director and Founder

Project Impact, Inc. is a nonprofit organization dedicated to making medical technology and health-care services accessible, affordable, and financially self-sustaining. Part of the International Federation of Impact Foundations, Project Impact focuses its efforts on avoidable disabilities — most recently those relating to sight and hearing. Disability is often both a cause and consequence of poverty. Project Impact puts the disabled back on their feet and on their way back to economic independence. Project Impact’s work embodies the economic paradigm of compassionate capitalism, which emphasizes utilizing production capacity and surplus revenue to serve all economic strata, rich and poor alike, in a way that is both financially self-sustaining and affordable to all members of society. It is philanthropy bypassing the middleman. In this paradigm, profit is the means to an end, not the other way around.¹¹

Project Impact enables technology transfer for establishing the manufacture of affordable medical products and development of financially sustaining healthcare service-delivery models. Their sustainability is rooted in their pricing model; revenues from sales to higher-income patients subsidize sales to lower-income patients to insure greater availability of critical health-care technologies in developing countries. This requires a mastery of costs at every step in the supply chain.

PROGRAM FOR APPROPRIATE TECHNOLOGY IN HEALTH (PATH): Michael Free, Vice President

PATH’s mission is to improve the health of people around the world by advancing technologies, strengthening systems, and encouraging healthy behaviors. PATH is an international nonprofit organization that creates sustainable, culturally relevant solutions, enabling communities worldwide to break longstanding cycles of poor health. By collaborating with diverse public- and private-sector partners, PATH

¹⁰ KickStart One-pager. Workshop organizational profile.

¹¹ Project Impact. Taken from website October 13, 2005. <http://www.project-impact.net/>

*helps provide appropriate health technologies and vital strategies that change the way people think and act.*¹²

One of PATH's major challenges is the fact that "those who use, those who choose, and those who pay the dues" for health products are all different. In other words, in the public-health sector in developing countries, decision making is often segmented, with international agencies establishing the standards for medical products and processes, national ministries paying the bill — all on behalf of health-service clients who simply benefit. In many developing countries, where most formal health care is provided through highly subsidized state clinics, the patient is the user of the product listed (approved) by the World Health Organization, but paid for by a donor such as the United States Agency for International Development or UNICEF. This creates a complex dynamic. For example, if PATH wants to do feasibility testing that involves end users, they need to keep the choosing agency involved as well. Interests and capacities of different stakeholders may be in conflict. PATH faced such challenges in trying to get people to accept their nonreusable syringe for vaccinations (Uniject™) — many wouldn't admit there was a problem with the syringe they were currently using. Many nurses were uncomfortable with changing vaccination protocols, and procurement agencies or ministries had budgets to protect, thus they were uncomfortable with the behavioral change required with PATH's technology. A key lesson learned was the need to build constituencies and get support early on. The challenge was building a prototype while getting the stakeholders to "co-own" the problem and solution.

"The most creative time of a social enterprise comes in the early days — when innovators are trailblazing. But it can also be the most resource-scarce period. This is the point when philanthropy can make a big difference. The challenge is how to ensure that foundation support leads to private-sector investment in the future."

*Douglas Steinberg,
Senior Program Officer
The Lemelson Foundation*

SOLAR ELECTRIC LIGHT COMPANY (SELCO): Harish Hande, CEO

*SELCO provides infrastructure solutions to underserved households and businesses in India and the rest of the developing world. Through its 25 centers in India, SELCO has brought reliable, affordable, and environmentally sustainable electricity to 35,000 homes and businesses since 1995. From solar lighting and electricity, to clean water and wireless communications, SELCO aims to empower its customers by providing complete packages of product, service and consumer financing, all under one roof.*¹³

SELCO's challenge is to create a sales model for a product that saves money and improves lives over a relatively long-term (from the perspective of those living hand-to-mouth), but requires a large up-front investment. For example, a solar electric light kit might provide cleaner, higher-quality light at a lower cost over the long run, but for those with no savings and only a few rupees to spend each day, alternatives such as kerosene lamps are more manageable. To overcome this, SELCO developed innovative financing tools for their customers; they created a guarantee fund in the bank to cover part of the interest rate on customer loans. This required building relationships and trust, while facilitating the flow of loans, and thus sales. However SELCO faced challenges in training thousands of bank managers to understand and support solar technology. SELCO also lacked a convenient network of advisors, which resulted in a more time-consuming, but ultimately very effective, process of learning by trial and error. SELCO has embraced this process, and encourages honesty and sharing among all social entrepreneurs.

¹² Program for Appropriate Technology in Health. Taken from website, October 13, 2005. <http://www.path.org/about.php>

¹³ SELCO. Taken from website, October 13, 2005. <http://www.selco-india.com/about.html>

DISCUSSION 2: THE ROLE OF FINANCING

Discussion Questions

When discussing the role of financing at each stage of the *Idea-to-Impact* process, the discussion groups were challenged to consider the following questions:

- **Needs:** What types of financial resources did the entrepreneur require, what was actually obtained; how were the resources accessed?
- **Availability:** What types of financial resources are available at each stage; what type of funding institutions (e.g., multi-lateral development bank, traditional bank, foundation, etc.) and/or specific organizations are you aware of that might have funded particular stages?
- **Opportunities:** What else might be done to provide funding — can we work together?

Identified Priorities

Participants identified the following as being the most important financing priorities:

1. Front-end, high-risk investment.
2. Enhanced communication between investors and entrepreneurs.
3. Financing that supports social impact.
4. Financing for market-development throughout the process.

Financial resources available included personal funds and angel investors in the conception phase, and grants, philanthropy and loans throughout the rest of the process. The participants identified opportunities to work with available resources and address the challenges in financing the innovation process (see Appendix C for financial resource needs, availability, and opportunities).

"Investors and mentors must provide diverse resources to social entrepreneurs working for the poorest of the poor. Philanthropic capital is critical at the R&D and market-development stages, while later, many organizations can absorb loans or even equity investments as they scale their enterprises. Knowledge, capacity building and networks are essential throughout."

*Julia Novy-Hildesley
Executive Director
The Lemelson Foundation*

FINANCING CHALLENGE #1: ACCESS TO HIGH-RISK, FRONT-END INVESTMENTS

The Challenge

Iqbal Quadir expressed the difficulty in getting his first investment due to lack of angel investors or experimental capital for research and development. Eventually, GrameenPhone's network was built with \$125,000 from an angel investor and Iqbal's sweat equity. SELCO's Harish Hande reported similar challenges as he had to rely on personal funds, small grants, and \$500 from his family to develop his ideas in rural India over two and a half years. Harish felt the lack of funding slowed down his innovation process and business plan development. He invested \$1,000 to purchase a solar unit, sold it, and used the profits to buy another unit. He repeated this process 500 times using the initial investment. This lack of experimental capital for trailblazing, or early-stage learning and development, is a challenge faced by many social entrepreneurs.

Potential Solution

Build the investor network and pool different types of resources available for experimental stages. This would consist of financial and nonfinancial resources that various parties would bring to the table in support of emerging social enterprises. Grant money from foundations could be combined with investment funds to support stages of enterprise development that would normally be of limited interest to investors (due to long horizons before the return on the investment). Grant money could also be used as "first-loss cushions" or guarantees to make investments more

attractive. Such collaborative investments would limit the risk for individual investors and increase efficiencies in shared due diligence, transaction costs, monitoring, and well-structured access to human and financial capital for investees.

FINANCING CHALLENGE #2: CONNECTING INVESTORS AND ENTREPRENEURS

The Challenge

Most groups recognized the lack of a network as a significant global challenge restraining social innovation. As noted in the participant hopes and expectations for the day, connecting investors with entrepreneurs was a priority for many. A key success factor in scaling-up innovation is having the right support at each phase to move the process forward. Iqbal Quadir noted that it's often "hard to find \$100,000, but relatively easy to find \$100 million." Funders and entrepreneurs need to understand each other's needs and interests to create partnerships. Part of this challenge is rooted in the fact that developing-country entrepreneurs have difficulty connecting with foreign investors due to visa restrictions, travel costs and limited networks. In addition, the field lacks a fluid flow of information and networks. For example, many developing or emerging countries have little or no capacity for rating investment opportunities (such as credit-rating agencies). This means that the potential of an emerging enterprise is not readily available, and gathering this information can be costly or unreliable.

Potential Solutions

- Convene in-country investment forums throughout the developing world. Holding investment forums in the countries in which investors are interested in addressing poverty would ensure better connections with local entrepreneurs.
- Create a technology platform connecting social entrepreneurs with financial resources.

As technology connects people on a global scale, it provides the opportunity to enhance deal flow between investors and entrepreneurs. Several initiatives are underway, such as "Synapse", a project being developed by David Green with Ashoka. This will help create a virtual platform for networking, with special attention to engaging participants through human contact to spur action among them. Thematic sites or wikis can evolve as participants add information, extend the network, and develop tools for assessing social enterprises.

FINANCING CHALLENGE #3: APPROPRIATE FINANCING TO SUPPORT SOCIAL IMPACT

The Challenge

Michael Free of PATH and Charles Slaughter with The HealthStore Foundation discussed the importance of maintaining focus on social impact throughout the innovation process, including selecting the proper sources of financing. Investment mechanisms that allow investors to get some of their money back (e.g. loans) provide opportunities for reinvestment in additional social innovations and, ultimately, a larger social impact. Other investments, such as grants and donations, are needed at certain stages, but these mechanisms should not be relied upon for the long term, as this could minimize overall social impact since the funds are not recycled back into future investments. Thus, financing mechanisms should focus on maximizing both social and economic impact.

The lack of a fluid flow of information between donors and investors on one side, and social enterprise on the other, creates a real barrier to the scaling-up of social

innovation. Investors are not finding the right deals, while entrepreneurs struggle to identify the right type of capital at various stages of their development. There is a need for a technical platform to handle the mass market while providing a human touch that ensures social interaction. In addition, deals need to flow continuously to be effective.

Potential Solutions

Research various forms of investment and compare their social effects for optimal financing methods. Identifying the social impacts of different options for financing will provide entrepreneurs with the ability to target appropriate funding mechanisms at various phases. This information will also guide funders as to the appropriate form of support, whether grants or investments.

Create a technology platform connecting social entrepreneurs with financial resources. As technology connects people on a global scale, it provides the opportunity to enhance deal flow between investors and entrepreneurs. Such a platform must engage participants and spur action among them. David Green is currently developing such a tool (“Synapse”) and is looking for feedback from the group regarding platform development and effectiveness.

FINANCING CHALLENGE #4: MARKET-DEVELOPMENT

The Challenge

Market-development required 80% of the costs for some enterprises, yet sustained funding for this process was difficult to acquire. IDE-India and KickStart both faced this challenge and sought investors that would accept return as the market was developed. Both organizations are close to the crossover point of becoming self-sustaining through their business-to-business sales.

Marketing costs are lower with the business-to-business model, and everyone in the supply chain is making commercial rates of return and maximizing social impact, making the supply chain sustainable. Key success factors are ensuring that both entrepreneurs and investors understand the market-development costs for different models, and identifying appropriate sources of funding.

Potential Solutions

- Identify and map working capital available for each stage in the process. Different organizations have different needs throughout the innovation process. An understanding of the working capital available at various stages allows investors to partner when appropriate, and social entrepreneurs to seek funding that meets their objectives. This would include looking for investors who would accept return after the supply chain has been developed.
- Improve visibility of market-development costs so they do not consume equity investment or slow down organizational growth. Case examples of market-development for various enterprises could assist new entrepreneurs in realistically estimating their costs for this stage and communicating them to investors. The appropriate source of funding can be identified with more accurate market-development costs.

DISCUSSION 3: ROLE OF NONFINANCIAL ASSISTANCE AND KNOWLEDGE MANAGEMENT

Discussion Questions

The participants rotated from group to group to engage in a discussion with others around the nonfinancial assistance and knowledge-management requirements needed by social enterprises. They focused on the following questions at each stage of the process:

Nonfinancial assistance:

- **Needs:** What types of other resources (training, mentoring, networks, facilities, etc.) did the entrepreneur require, what was actually obtained and how were the resources accessed?
- **Availability:** Which support service institutions (general type e.g., business consulting, legal, etc., and/or specific organizations) are you aware of that might have contributed meaningfully here?
- **Opportunities:** What else might be done to provide assistance — can we work together?

Knowledge management:

- What information is necessary to assess the potential and capacity of a social enterprise (and how do we obtain it)?
- What information is needed to facilitate ongoing management or strategic decision-making for program improvement?
- How can we measure and disseminate knowledge about program effectiveness and impact?
- Can we work together to fill the information gap?

Identified Priorities

The following nonfinancial assistance and knowledge-management priorities were identified:

1. Enhanced communication between investors and entrepreneurs.
2. Tracking mechanisms for social-impact measurement.
3. Nonfinancial technical assistance for entrepreneurs.
4. Case studies of successes and failures; identification of social and economic impact.
5. Informal support networks up front.
6. Library of resources.

Potential solutions were drawn from resources that are currently available to meet these needs, such as David Green's work on a technology platform for networking and deal flow, and the International Finance Corporation's tracking of impact-monitoring practices. In addition, many participants have developed resource libraries that could be combined. The Grameen Foundation is working with Ashoka and Microsoft to create a network of social entrepreneurs and investors, which is going to be used as a pilot project by Social Fusion as they create an incubation pathway. (See Appendix C for nonfinancial and knowledge-management resource needs, availability, and opportunities.)

NONFINANCIAL CHALLENGE #1: EARLY ACCESS TO NETWORKS AND TECHNICAL ASSISTANCE

The Challenge

In many settings, emerging social entrepreneurs operate in isolation, and do not have access to global networks that might provide assistance in developing strategies, business plans, and human resources to support their visions. Poor telecommunications may constitute a barrier, but simply not knowing who to turn to for support is the larger challenge. SELCO, for example, reported the need to tap into informal networks for nonfinancial support in the conception phase. Harish Hande sought mentors and those with experience and knowledge regarding specific challenges, such as how to gain access to bank credit for buyers. This kind of support that SELCO sought often comes from the Board of Directors once the business is created, but entrepreneurs need advice in the early stages as well.

Potential Solution

Foundations supporting entrepreneurs should provide access to informal support networks in the early phases. One example is Social Fusion's ACSN™, which supports social entrepreneurs through a process of assessment, coaching mentoring, skills building, and networking and funding. Social Fusion provides a web-based tool that is supported through a network of consultants who coach entrepreneurs through a series of telephone conversations and visits.

Susan Davis of Grameen Foundation explained how they are currently partnering with Microsoft to create a network that would assist social entrepreneurs in both their financial and nonfinancial needs. This would enhance the long-term sustainability of social enterprises, and Grameen Foundation will work with Social Fusion to develop the concept in a pilot project.

NONFINANCIAL CHALLENGE #2: MEASURING SOCIAL IMPACT

The Challenge

Information regarding the impacts of social enterprises — human impacts, such as improvements in quality of life, health, or education — is critical to strategic decision making. Yet, impacts that occur at the end of a long chain of cause and effect, often years after the initial action, can be among the most difficult to assess. Investors concerned with impacts beyond the financial return on investment will want reliable impact evaluations, and donors such as foundations will place an even greater premium on these impacts. Organizations that can demonstrate their impact are better positioned to attract investors or donors. But many organizations do not have the resources (financial or human) until long into the development process, by which time it may be difficult to catch up.

Potential Solution

Participants reported that entrepreneurs would like to report comprehensive social impacts of their business for all stakeholders. IDE-India and KickStart discussed the need to share and replicate good practices in impact monitoring among social enterprises, such as their own models for tracking impacts through product-warranty systems. KickStart insists that one characteristic of success is that a product yields measurable impacts. If the impact cannot be proven, the social enterprise is probably not pursuing a promising intervention.

The meeting participants, therefore, recommend efforts to improve tracking of social enterprise impacts. Agnes Dasewicz, with the International Finance Corporation

"We cannot separate capital and capacity in determining how to support the growth of social enterprises globally."

*Amber Nystrom
Executive Director
Social Fusion*

(IFC), reported that the IFC is currently tracking best monitoring practices (see Opportunities for Action in the following section).

NONFINANCIAL CHALLENGE #3: COACHING AND MENTORING SOCIAL ENTERPRISES

The Challenge

Technical assistance is often a “push” from an external organization, yet each enterprise faces unique challenges that often cannot be supported via generalized tools. Depending on which phase the innovation is in, technical assistance is often more effective when it is a perceived need of the enterprise versus a “push” from external partners. For example, SELCO needed to train bank managers about the income-generating benefits of solar lighting technology so that loan officers would lend to poor people interested in adopting the technology. This was not an off-the-shelf service offered by any external organizations, and SELCO had to undertake this by trial and error.

Potential Solution

Provide financial resources to customize training and assistance as needed by the different enterprises instead of creating generalized programs. Foundations and other donors can support the nonfinancial service providers (such as Social Fusion) in order that they may build the capacity for tailored support to entrepreneurs. Conversely, investors should build resources for obtaining tailored assistance into investments made to social enterprises.

NONFINANCIAL CHALLENGE #4: SHARING RESOURCES

The Challenge

In addition, participants highlighted the need for better sharing of resources to enhance knowledge and access to resources regarding the Idea-to-Impact process, with particular emphasis on incubation and market-development. Knowledge resources include experiences from others, through published papers, case studies, or evaluations. It may also include tool kits, consultants, or agencies that provide nonfinancial services. Currently, many of the participants are individually collecting their relevant resources, and sharing is haphazard at best. This reduces overall efficiency of the group and inhibits collective learning.

Potential Solution

Create an online library of resources. This would be a web-based structure that would be expanded through contributions from users. By building a collaborative tool, one-stop access to information would enable the group to move forward with a common learning agenda.

NONFINANCIAL CHALLENGE #5: DOCUMENTING LESSONS LEARNED

The Challenge

Following from the preceding challenge, participants reported a specific problem related to documenting mistakes. Participants noted that the learning curve for many social entrepreneurs is very high, and mistakes are inevitable. An organization that learns from its mistakes is more likely to succeed, but it must create a culture that embraces mistakes, rather than sweeps it under the rug. Sharing stories of mistakes would help others learn without having to commit the same errors. For example, Harish Hande of SELCO felt that if he had known about previous failures of social entrepreneurs in his field, he could have succeeded more quickly in his venture.

However, case studies are usually written about successful enterprises, and they lack information about failure.

Potential Solution

Create the incentive for entrepreneurs to share their failures via formal documentation others can learn from. Two articles were recommended to the group: Monique Maddy discussed the successful creation of a networking company in India that eventually failed,¹⁴ and the Natural Resources Forum documented commercialization of photovoltaic systems.¹⁵ Participants were encouraged to document their experiences to help other entrepreneurs innovate successfully.

WRAP-UP: OPPORTUNITIES FOR ACTION AND WHERE WE GO FROM HERE

After spending the day analyzing each entrepreneur's experience and identifying key challenges, participants prioritized the challenges and potential solutions. Participants stepped forward to take the lead on specific solutions, while support teams were built around their ideas. Team leaders submitted the following descriptions of how they envision this undertaking and how others can get involved.

Build Network to Pool Resources

Setting the Table for Collaborative Investment Activity: Can we build a social-enterprise/capital-markets syndicate?

"Coordinated funding is tricky, based on trust and common goals among participants. But it also holds immense benefit in terms of efficiency in shared due diligence, transaction costs, monitoring, and well-structured access to human and financial capital for investees, not to mention access to higher-quality deals for investors. Posited metaphorically as a "virtual dinner party," a loose network structure might tie in a broad range of funder and financial investment types, map in the time and talent of both volunteer and paid consultants, and otherwise share best practices and transactions of doing deals together. Diners each bring their appetite, and their "potluck" deals. The table is set. Please RSVP." — Tim Freundlich.

Lead: Tim Freundlich, Calvert

Support: Jigna Desai, Nike Foundation
Alois Flatz, BTS Investment Advisors (India)
John Goldstein, Medley Advisors
Oliver Karius, Vantage Point
Maritta Kock-Weser, GEXSI
Julia Novy-Hildesley, The Lemelson Foundation
Amber Nystrom, Social Fusion
Arthur Wood, Ashoka

Compile a Library of Resources

Because participants found useful the online resource created for the Thought Leaders meeting, The Lemelson Foundation is exploring maintaining and enhancing that platform. They would like to work in partnership with the support team of individuals who expressed interest in this initiative as well as with the larger group of meeting participants and others to seek input on the design of this online resource. Initially, The Lemelson Foundation has considered including:

1. Information on the meeting itself (including biographies of participants, background reading materials, meeting summary report, etc.);

¹⁴ Maddy, Monique. Dream Deferred: The Story of a High-Tech Entrepreneur in a Low-Tech World. *Harvard Business Review*. May 2000.

¹⁵ D'Addario, P.J. Golden Genesis and the Teotonia Velela Foundation: commercializing PV residential electrification with a not-for-profit partner. *Natural Resources Forum*. Special Issue on Small-Scale Investment in Natural Resources. Vol. 24, No. 4, Nov. 2000.

2. An open-source contacts database that would allow us, over time, to document the individuals and groups working in the area of technology-based social enterprise focused on those earning less than \$2 a day (this would include entrepreneurs, foundations, investors, technical-assistance providers, business-development service organizations, and others); and
3. An open-source "map" or graphic that would illustrate the Idea-to-Impact process for technology-based social enterprises marketing to people earning less than \$2 a day, and allow users to share lessons, challenges, needs and resources that relate to each stage of the Idea-to-Impact process.

Lead: Julia Novy-Hildesley, The Lemelson Foundation

Support: Amber Nystrom, Social Fusion
John Goldstein, Medley Advisors
Oliver Karius, Vantage Point

Improve Tracking of Social Impact

The authors of *Private Investment for Social Goals: Building the Blended Value Capital Market*, recently published by the World Economic Forum's Global Foundation Leaders Advisory Group, call for "establishing a standard measurement mechanism for social and environmental outcomes. The report goes on to state that "while some significant work on measures of social performance has occurred within specific sectors, sharing this intellectual capital across sectors is more the exception than the rule." The proposed group on sharing and developing monitoring and evaluation methodologies would attempt to address this challenge.

The group would work to:

1. Share current methodologies used in impact measurement by stakeholders in the social investment field (entrepreneurs, investors, and other related parties);
2. Work to aggregate (where possible) impact indicators into common measures to be applied in evaluating the impact of social investments;
3. Adopt those indicators and compare them across various initiatives;
4. Develop and share a "knowledge-management" piece based on this work to be disseminated to other potential users of such indicators and invite them to cooperate in the effort.

The group would work through an organized series of information exchanges and meetings (hopefully to coincide with other related events) on the subject.

Lead:

Agnes Dasewicz, Strengthening Grassroots Business Initiative (IFC)

Support:

Michael Free, PATH
Julia Novy-Hildesley, The Lemelson Foundation
Jill Rademacher, Case Foundation
Amitabha Sadangi, IDE-India
Kevin Starr, Mulago Foundation / Rainer Arnhold Fellows
Arthur Wood, Ashoka

The workshop was useful for "building relationships with funders, nonprofits and the private sector so that we may begin to share our resources and strategies, and begin to act with more coordinated efforts to advance the social change we all hope for."

*Will Morgan
Program Officer
Skoll Foundation*

Closing

Julia Novy-Hildesley closed with a brief review of the meeting purpose: to identify how best to support the growth of innovative, technology-based social enterprises that engage the world's poorest people to productively meet their own needs and create their own wealth. She thanked the participants for their deep engagement in analyzing the issues and sharing potential solutions, and stressed how important it will be to follow up on the initiatives the participants worked so hard to identify.

APPENDIX A: AGENDA

1. **Teleconference with Bellagio Forum Participants**
2. **Breakfast Service & Networking**
3. **Framing the Day**
Welcome, introductions, meeting purpose and agenda, and a brief presentation to frame the day's activities.
4. **Small Group Discussion 1: "Learning from Entrepreneurs"**
Small discussion groups assembled around a designated group-resource person, each of whom was an accomplished social entrepreneur.
5. **Small Group Discussion 2: "The Role of Financing"**
In small discussion groups and plenary format, participants explored key issues regarding the role of financing in supporting the growth of innovation.
6. **Lunch**
7. **Small Group Discussion 3: "The Role of Nonfinancial Assistance & Knowledge Management"**
In small discussion groups and plenary format, participants explored key issues regarding the role of nonfinancial assistance in supporting the growth of innovation.
8. **Wrap-up: "Opportunities for Action & Where We Go from Here"**
Opportunities for working together were identified, with corresponding next steps, resource requirements, and commitments for follow-up.
9. **Dinner**

APPENDIX B: PARTICIPANT LIST

Name and Position	Organization
Craig Cramer, Senior Program Officer, Strategic Opportunities	Bill & Melinda Gates Foundation
Patrick J. D’Addario, President	LaGuardia Foundation
Agnes Dasewicz, Investment Officer	Strengthening Grassroots Business Initiative (IFC)
Susan M. Davis, Chair	Grameen Foundation USA
Russell J. deLucia, Director	Small-Scale Sustainable Infrastructure Development Fund (S3IDF)
Jigna Desai, Strategic and Finance Planning	Nike Foundation
Martin Fisher, Executive Director, Co-Founder	KickStart
Alois M. Flatz, Managing Partner	BTS (India) Investment Advisors
Michael J. Free, Vice President	Program for Appropriate Technology in Health (PATH)
Tim Freundlich, Director of Strategic Development	Calvert Social Investment Foundation
John D. Goldstein, Senior Managing Director	Medley Advisors
David Green, Executive Director	Project Impact
Harish H. Hande, CEO	Solar Electric Light Company (SELCO)
Andy Horsnell, Senior Associate & Facilitator	Rolfe Larson Associates
Oliver S. Karius, Managing Director	Vantage Point
Maritta Koch-Weser, Director and CEO	Global Exchange for Social Investment (GEXSI)
Eric Lemelson, Vice President and Treasurer	The Lemelson Foundation
Patrick Maloney, Manager, Investments	Omidyar Network
Will Morgan, Program Officer	Skoll Foundation
Satheesh Namasivayam	Entrepreneur
Julia Novy-Hildesley, Executive Director	The Lemelson Foundation
Amber Nystrom, Executive Director	Social Fusion
Paul R. Polak, CEO	International Development Enterprise - USA
Iqbal Z. Qadir, Founder; Lecturer	Grameen Phone; Harvard University
Jill Rademacher, Senior Vice President for International Programs	Case Foundation
Heidi Rahn, Consultant & Workshop Reporter	Independent
Amitabha Sadangi, CEO	International Development Enterprise, India (IDEI)
Marnie Sigler, Director	Omidyar Network
Charles Slaughter, President	The HealthStore Foundation
Kevin Starr, Director	Mulago Foundation / Rainer Arnhold Fellows
Douglas Steinberg, Senior Program Officer	The Lemelson Foundation
Arthur Wood, Social Finances Services	Ashoka, Social Financial Services

APPENDIX C: PARTICIPANT BIOGRAPHIES

Please note biographies may have been shortened.

Craig Cramer, Bill and Melinda Gates Foundation

Craig Cramer is a Senior Program Officer in the Strategic Opportunities Group at the Bill and Melinda Gates Foundation, which he joined in June 2005. Prior to joining the Gates Foundation, Mr. Cramer founded and served as Executive Director of EMPower, The Emerging Markets Foundation. Mr. Cramer developed the idea for EMPower while a Principal and Senior Portfolio Manager at Canyon Capital Management, a hedge fund based in Beverly Hills, CA. Mr. Cramer received a B.A. in Political Science from the University of California, Irvine, and a Masters of International Affairs from Columbia University, where he specialized in Human Rights and International Law. craig.cramer@gatesfoundation.org

Patrick J. D’Addario, Fiorello H. LaGuardia Foundation

Mr. Patrick J. D’Addario’s responsibilities as founding Director and President of Fiorello H. LaGuardia Foundation include development and implementation of all LGF programs, such as the design of the Carbon and Project Preparation Facility and the LP Gas Rural Energy Challenge Program for the United Nations Development Program. Previously, as Director of Operations, Latin America, for the Golden Genesis Company, he was responsible for the creation of 70 photovoltaic pico utilities in the northeast of Brazil. As Co-Founder and President of the International Fund for Renewable Energy and Energy Efficiency, Mr. D’Addario was responsible for more than 20 early-stage investments in renewable energy and energy efficiency (RE/EE) projects in 15 countries, totaling more than \$1 million. Mr. D’Addario also was a founder and, subsequently, Vice President, of the Brazilian Renewable Energy and Energy Efficiency Trade Association, ABEER. Mr. D’Addario holds an undergraduate degree from St. John’s College, Annapolis, Maryland, and an M.P.A. from the Woodrow Wilson School, Princeton University. pdaddario@laguardiafoundation.org

Agnes Dasewicz, Grassroots Business Initiative, International Finance Corporation, The World Bank Group
Established in 2004, IFC’s Grassroots Business Initiative (GBI) seeks to strengthen, scale up and replicate innovative social enterprises that create sustainable opportunities for the poor, empowering and engaging them as entrepreneurs, employees, consumers, and suppliers. Agnes is responsible for managing the portfolio of GBI projects, and has extensive experience in SME and small-business financing in developing and transition economies. Prior to joining the Initiative, Agnes focused on development of SME risk-capital funds in sub-Saharan Africa through her work with the Institute for SME Finance. Before moving to the development field, Agnes financed projects ranging from telecom companies to retail chains as an investment officer for one of the top private equity funds in Central and Eastern Europe. She holds a B.A. in International Affairs from The George Washington University, and an M.B.A. from the McDonough School of Business at Georgetown University. adasewicz@ifc.org

Susan M. Davis, Grameen Foundation USA

Susan is the Chair of the Grameen Foundation USA, a global microfinance and technology organization. She works with Ashoka: Innovators for the Public, leading its Global Academy for Social Entrepreneurship. She is also a member of its Board committee that selects social entrepreneurs and oversees Ashoka’s expansion to the Middle East, North Africa and Central Asia. She currently serves as an external advisor to the Director General of the International Labor Organization and a member of Mary Robinson’s Human Rights Advisory Group for the Ethical Globalization Initiative. Susan was the Executive Director of the Women’s Environment & Development Organization from 1993 to 1998. Susan earned a B.S.F.S. at Georgetown University’s School of Foreign Service and a M.P.A. from the Kennedy School of Government at Harvard University. She was also an M. Phil candidate in International Relations at Oxford University in 1980-81. thissdavis@aol.com

Russell J. deLucia, The Small-Scale Sustainable Infrastructure Development Fund Inc. (S3IDF)

Dr. Russell deLucia is President, Board member, and one of the founders of The Small-Scale Sustainable Infrastructure Development Fund, Inc. (S3IDF). He is also a Board member of its affiliate, The Small-Scale Sustainable Infrastructure Development Fund, Inc.-South Asia (S3IDF-SA). Trained in engineering and economics (Ph.D. Harvard University), for more than 30 years, he has been a consultant heading teams examining energy, water, and other natural resources and related infrastructure-development issues. He has advised governments, firms, financial institutions and non-governmental organizations regarding policy and project matters, with experience in more than 60 countries in Asia, the Americas, Africa, and Eastern Europe. In recent years, the focus of his work has been primarily on small-scale (often rural) infrastructure and related investments (e.g. energy-dependent agro-

processing schemes) and on mechanisms that allow such investments to yield greater development synergies. He serves as an Editorial Advisor for Natural Resources Forum (*The UN Journal*). He also has experience as a direct investor in various investments in developing countries.
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Jigna Desai, Nike Foundation

Jigna Desai was born in India and moved to Clearwater, FL when she was 11 as her grandfather insisted on moving her and her sisters from India to the U.S. for their education. That strong emphasis on education stayed with her and partly led her to join the Nike Foundation after 12 years of experience in the finance side of the business world. As a CPA, she worked for Ernst and Young in their audit practice for over 7 years and joined the Nike Internal Audit team in 2001. Her most recent role with Nike is within Nike's Global Business Planning group, focusing on their European region and Nike Portfolio. Her role is to ensure that the foundation's investments are transparent, impactful and measurable. Working with foundation partners and Nike experts, she will tackle the challenge of bringing a business approach to the fight against poverty.
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Martin Fisher, KickStart

Martin Fisher received his Ph.D. at Stanford in Theoretical and Applied Mechanics. But it wasn't until he made friends from developing countries in graduate school and spent a summer in Peru that he actually considered how to apply his learning to help the developing world. He went to Kenya on a Fulbright in 1985, and never looked back.
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Alois M. Flatz, VantagePoint Global and BTS Investment Advisors

Mr. Flatz is the President and co-founder of VantagePoint Global (VPG) a new, independent, nonprofit organization dedicated to promoting sustainable investing in the emerging markets. Mr. Flatz is also a Managing Partner of BTS Investment Advisors (BTSIA), a specialized boutique in financial consultancy and investments in the Indian private equity sector. In his professional career, Alois Flatz has focused exclusively on the interface of the financial industry and sustainable development. He served as partner and member of the Executive Committee of SAM Group Ltd., an asset-management company focused on sustainability investments. Alois Flatz is also the co-founder of the Dow Jones Sustainability Indexes (DJSI), the world's first and most recognized financial sustainability index. Previous to SAM he worked as a permanent advisor to the Austrian Ministry of Environment. Mr. Flatz holds a Ph.D. in Business Administration from St. Gallen University, Switzerland, a Masters Degree in Business Administration from University of Economics of Vienna, Austria, and a post-master diploma in International Management from École des Haute Études Commerciale (HEC), Paris, France. Alois is fluent in German, English, and French.
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Michael J. Free, Ph.D., Program for Appropriate Technologies in Health (PATH)

Dr. Free is Vice President and Senior Advisor for Program for Appropriate Technologies in Health (PATH). He has been associated with PATH since the organization's inception, and he has led PATH's technology-related activities for more than 20 years. Currently, he oversees PATH's Technology Solutions Program in addition to providing advice, facilitation, and oversight of PATH's other technology activities. Before joining PATH, Dr. Free spent seven years at Battelle Northwest, developing technologies to improve reproductive health. Dr. Free is a British citizen and received his Doctorate in Physiology from Ohio State University (1968).
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Tim Freundlich, Calvert Social Investment Foundation

Tim is Director of Strategic Development for Calvert Social Investment Foundation, a 501(c)3 nonprofit social-enterprise finance company managing a range of products that bring together the philanthropy and social investment spaces. He has been with Calvert Foundation since June of 1997, and manages business development, strategic partnerships and new products development. Recently, Tim conceived of and launched Calvert Giving Fund (a socially responsible donor-advised fund), does significant capitalization work for Calvert Community Investment Notes, and has helped to prototype Calvert Community Investment Partners, a merchant bank for the community-development and social-enterprise space. Previously, he has worked as a video editor, a wine buyer and a manager/partner of restaurants in NYC and Maine. He received a B.A. in Film from Wesleyan University (CT) and a M.B.A. from the University of San Francisco. Tim spends much of his free time as an advisor to various nonprofits, and is especially involved in Social Venture Partners International and Bay Area. He lives with his wife in San Francisco, CA.
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John D. Goldstein, Medley Global Advisors (MGA)

John D. Goldstein, Senior Managing Director with Medley Global Advisors (MGA), is responsible for strategic planning. Prior to joining MGA, Mr. Goldstein was a consultant for Andersen Consulting's (now Accenture) strategy practice. While at Accenture, Mr. Goldstein worked with senior executives at global financial institutions on a range of projects in the U.S. and Europe. Mr. Goldstein is also executive director of the Medley Institute. In these capacities he represents MGA as a Board or Advisory Board member for efforts such as 3iG (International Interfaith Investment Group); ACCESS; Global Giving; and GEXSI. Mr. Goldstein is an honors graduate of Yale University with degrees in History and Ethics, Politics, and Economics. jgoldstein@medleyadvisors.com

David Green, Project Impact

After earning both Bachelor's and Master's Degrees in Public Health, David went to work for the SEVA Foundation, an institution that has played a leading role in initiating efforts to reduce avoidable blindness around the world. With SEVA, he developed blindness-prevention programs recognized for their excellence in service delivery, quality of surgery, financial self-sufficiency, and capacity to reach the disadvantaged. He began to hone his idea of compassionate capitalism while working with a partner organization, the Aravind Eye Hospital in Madurai, India. As Aravind was unsuccessful in negotiating with western manufacturers to obtain intraocular lenses, David suggested they partner with SEVA and establish a manufacturing facility to produce these lenses themselves. He raised the necessary funding, cultivated technology partners to help him design a manufacturing process that did not infringe on patents, and developed a sustainable business plan. In 1992, Aurolab began production and is now one of the largest manufacturers of intraocular lenses in the world, with sales in 86 countries. In 1996, recognizing that another limiting factor for health care was the availability of sterile surgical sutures, David directed the necessary technology transfer and established a manufacturing facility at Aurolab to produce ophthalmic suture products. In early 2000, David turned his attention to hearing aids, another product ripe for compassionate capitalism. dgreen888@earthlink.net

Harish H. Hande, Solar Energy Light Company (SELCO)

Dr. Hande is an engineer and renewable energy entrepreneur with extensive experience meeting the energy requirements of the health, education and water sectors. He is the co-founder of SELCO-USA. He is presently the Managing Director of SELCO-India, a solar energy service company in India. Since 1995, SELCO-India has installed over 45,000 PV systems. His experience includes many health-, education- and water-related projects. Overall, Dr. Hande brings technical, practical and commercial expertise for fostering sustainable projects. He is a member of several social-enterprise and renewable boards. Dr. Hande holds a Ph.D. in Energy Engineering (Solar), University of Massachusetts, and B.Tech (Hons), from the Indian Institute of Technology (IIT), Kharagpur, India. harish.hande@selco-intl.com

Andy Horsnell, Rolfe Larson Associates (RLA)

Prior to joining RLA, Andy served for nine years as the Assistant Director of the Acadia University Centre for Small Business and Entrepreneurship, and five years as founding partner of Authenticity Consulting, LLC. Over the last 16 years, he has consulted with, and trained hundreds of for-profit and nonprofit entrepreneurs in all major sectors throughout the U.S., Canada, and abroad. He founded and co-moderates the npEnterprise Forum listserv with Rolfe Larson, and has developed several business-planning workbooks and training programs. He brings strong skills and experience in the areas of feasibility assessment, strategy development, and financial modeling to the RLA team. andy@rolfelarson.com

Oliver S. Karius, VantagePoint Global (VPG)

Mr. Karius is the Managing Director and co-founder of VPG, a new, independent, nonprofit organization dedicated to building the capacity for sustainable investing in the Emerging Markets. VPG aims to incubate and support local organizations that have the skills, knowledge and experience to provide the practical services investors interested in sustainable investment need in emerging markets such as China, Brazil, India, Turkey, and South Africa. Mr. Karius has extensive international experience in Socially Responsible and Sustainable Investment (SRSI) research, indexing and investing at SAM Research, the Dow Jones Sustainability Index (DJSI), and several asset-management firms. He holds a M.Sc. in Environmental Technology, Global Environmental Change and Policy from Imperial College Centre for Environmental Technology (ICCET), Imperial College, London, and a Diploma in Biology from the Ludwig-Maximilians University (LMU) in Munich, Germany. oliver.karius@vantagep.org

Maritta Koch-Weser, Global Exchange for Social Investment (GEXSI)

Dr. Koch-Weser worked for almost 20 years at the World Bank, where she was closely associated with the build-up of environmental and social programs and policies. In her most recent World Bank assignment she was Director for

Environmentally & Socially Sustainable Development for the Latin America & Caribbean Region. Following her World Bank assignment, she served for two years as Director General of IUCN, The World Conservation Union. Dr. Koch-Weser is also President of Earth3000, an international nonprofit organization founded in Germany in 2001. Earth3000 supports innovations in governance for environment and development. She holds a Ph.D. from the Universities of Bonn and Cologne, taught Anthropology and Latin American Studies at George Washington University in Washington D.C., and carried out extensive field research in Brazil.
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Eric Lemelson, The Lemelson Foundation

Eric Lemelson is co-Vice President and Treasurer of The Lemelson Foundation. A winemaker, he has always followed in the creative and entrepreneurial spirit of his family. During a year off from law school, Eric followed his intuition and purchased a small farm bordering the wine-growing region in Yamhill County. He met noted winemaker, Dick Ponzi, who offered to buy grapes if Eric would plant a vineyard on his property. He spent the spring and summer of 1995 tending his two-acre vineyard, and loving the work. By the next summer, he was out in the fields preparing to plant another 30 acres of Pinot Noir, and Lemelson Vineyards was on its way. Prior to attending law school, Eric worked as a campaign staffer on local, state, and national political campaigns, and as a legislative aide. He received his J.D. in Environmental and Natural Resources Law from Northwestern School of Law of Lewis and Clark College, with a special focus on Western water law. Following law school, he directed a research center focused on Pacific Northwest water policy and aquatic biodiversity issues. Eric is also a board member of several Pacific Northwest environmental organizations.
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Patrick Maloney, Omidyar Network

Patrick Maloney makes investments in Omidyar Network's Microfinance and Enabling Technology groups. Before joining Omidyar Network, Patrick was most recently at Barclays Global Investors (BGI), where he led an effort to open socially responsible investment to institutional investors. As a result of this effort, North America's first socially responsible exchange-traded fund, the iShares KLD Select Social Fund (KLD) was launched in 2005. Prior to working at BGI, he was Director of Business Development at Rosum Corporation, a venture-backed location-technology company. Patrick started his career in arms control and international development, working for the Vietnam Veterans of America Foundation, a nonprofit dedicated to addressing the causes, conduct and consequences of war in the developing world, as well as the International Campaign to Ban Landmines. In 1997, the ICBL was awarded the Nobel Prize for Peace.
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Will Morgan, Skoll Foundation

As Program Officer for the Skoll Awards for Innovation in Silicon Valley, Will Morgan manages a grant portfolio designed to address the valley's most significant challenges. Before joining Skoll, Will worked as a Program Officer at International Development Enterprises (IDE) in Golden, Colorado, where he managed a program to distribute irrigation devices to poor, rural farmers in Haiti. Prior to IDE, he worked at Chemonics International in Washington, D.C., one of the Beltway's largest USAID contractors. In this position, he helped assemble consulting teams and prepared bids for U.S.-funded development projects in Latin America. He has additional experience in the fields of environmental law and foreign policy research. Will earned a B.A. in Latin American Economic Development from Franklin and Marshall College, in Lancaster, PA. He completed his International Master's of Business Administration at the University of Denver.
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Satheesh Namasivayam, Naan-Stop

Satheesh currently leads Naan-Stop, a new for-profit venture in Indian Food, and advises organizations in the field of enterprise-led development. Recently, he was a Senior Program Officer at The Lemelson Foundation. Previously, Satheesh served as a Teaching Fellow for the course titled "Technology and Development" at Harvard University's John F. Kennedy School of Government. Earlier, he worked for Ernst and Young LLP and ZEFER Corp., a Boston-based consulting firm, leading teams to craft business strategies for large corporations. Satheesh earned a Masters Degree in Public Administration from Harvard University, where his work focused on technology and development. He was awarded an M.B.A. and M.S. in Information Management from Arizona State University, during which period he attended the American Graduate School of International Management at Thunderbird. He also earned a B.S. in Engineering at National Institute of Technology in Trichy, India.
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Julia Novy-Hildesley, The Lemelson Foundation

Julia Novy-Hildesley is Executive Director of The Lemelson Foundation. Along with a team of advisors and staff, Julia develops and implements the Foundation's domestic and international programs, and oversees Foundation operations. Prior to her work with The Lemelson Foundation, Julia was the Director of the World Wildlife Fund's (WWF) California office, where she spearheaded the organization's strategy for marine conservation and public outreach on the West Coast of the United States. In 2000, Julia was appointed lecturer in the Earth Sciences and Anthropological Sciences Departments at Stanford University, where she taught ocean policy and marine conservation until January, 2002. Prior to joining the WWF, Julia conducted research in Madagascar, funded by a Fulbright Scholarship. She analyzed the potential for non-timber forest products to serve as economic alternatives to slash and burn agriculture in the island's rain forests. She continued working in this domain for U.S.A.I.D. in Madagascar and the World Bank in Washington D.C. Julia has conducted research in partnership with government agencies and nongovernmental organizations in Tanzania, Bolivia and French Polynesia, identifying strategies for economic growth that sustain natural resources. Julia earned a Master of Philosophy (M.Phil.) Degree in International Development from the Institute for Development Studies at Sussex University in the United Kingdom, funded by a Marshall Scholarship. She earned her Bachelor's Degree in Human Biology with a minor in African Studies, and graduated Phi Beta Kappa from Stanford University. Julia serves on the Board of Advisors to the World Affairs Council of Oregon, and is a Fellow of the Donella Meadows Leadership Fellows Program.
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Amber Nystrom, Social Fusion

Ms. Nystrom is the Executive Director of Social Fusion, a business incubator that builds the resources and knowledge to launch and grow highly innovative nonprofit and for-profit social ventures in the U.S. and internationally. Social Fusion's philosophy rests on the premise that sustainable innovation requires an ecosystem of support that bridges business expertise, proactive investment, and a community of social entrepreneurs advancing new solutions for systemic social change. Ms. Nystrom brings to Social Fusion 14 years' experience launching and scaling social change and small business ventures in the U.S. and internationally. Ms. Nystrom has worked in the U.S., Latin America, Africa and Europe, specializing in multi-sector initiative building, public-private alliances, and social-enterprise / SME capacity development. She is a PI International Population Studies Fellow, a Fritz Fellow, and has spoken and led workshops on social enterprise capacity and capital development at the Commonwealth Club, The World Affairs Council, Stanford, Berkeley Haas, Yale and other national and international venues. In addition to directing Social Fusion, Ms. Nystrom consults to the World Bank and Ashoka on social enterprise capital growth.
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Paul R. Polak, M.D., International Development Enterprises (IDE)

Dr. Polak, a psychiatrist and entrepreneur, is founder and President of IDE, an organization that has ended the poverty of more than 12 million dollar-a-day, one-acre farmers by enabling them to participate effectively in markets. Dr. Polak and IDE's work has been recognized by the Scientific American Top Fifty Award in agriculture policy (2003), the Ernst and Young "Entrepreneur of the Year" award for the Rocky Mountain Region in social responsibility (2004), and the Technology Museum of Innovation's Accenture Economic Development Award for the design of IDE's low-cost drip system (2004). Dr. Polak has published over 100 scientific papers about his work, and articles about him, and IDE, have appeared in *National Geographic*, *Harpers*, *Forbes*, and *Scientific American*.
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Iqbal Z. Quadir, Harvard's Kennedy School of Government and GrameenPhone

Iqbal has taught at the John F. Kennedy School of Government at Harvard University since 2001, focusing on the impact of technologies in the politics and economics of developing countries. His particular research interest is in the democratizing effects of technologies in developing countries, with some of his initial thoughts published in the Summer/Fall 2002 issue of *The Fletcher Forum of World Affairs*. He is currently a fellow at Harvard's Center for Business and Government. Quadir spent most of the 1990s founding and building GrameenPhone Ltd., which has now become Bangladesh's largest telephone company, with revenues of \$150 million in 2002. Its rural program is already available in more than 20,000 villages, providing telephone access to more than 30 million people, while helping to create microentrepreneurs in these villages. Quadir is an active board member or adviser to several companies and organizations involved in international development. Earlier in his career, he served as a Vice President of Atrium Capital Corp., an associate of Security Pacific Merchant Bank, both in New York, and a consultant to the World Bank in Washington, D.C. He received an M.B.A. and an M.A. from the Wharton School, University of Pennsylvania, and a B.S. with honors from Swarthmore College.
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Jill Rademacher, Case Foundation

Jill brings more than a decade of experience to her work at the Case Foundation. In her role as Vice President, Jill combines her expertise in community and international development with her extensive knowledge and experience in youth development and education. Before joining the foundation, she served as Director of Content Development for PowerUP, a national nonprofit founded with the help of the Case Foundation, AOL, Cisco Systems, Hewlett Packard, the Waitt Family Foundation, America's Promise, and an alliance of youth-serving organizations. PowerUP provided Internet access, equipment, and after-school programming in nearly 1,000 communities. Having worked with youth and communities in Europe, the Middle East, and Africa, she is recognized for her skill at working across cultures, and her efforts to expand opportunities for people around the globe. Jill has been inspired by many grassroots leaders, and has developed a hands-on approach to helping partners find resources and expertise to strengthen their organizations. Jill is an active volunteer with a number of international nonprofit organizations. She began her career as an educator, having received a Master's Degree in Bilingual and Multicultural Education from George Mason University. She currently serves on the advisory board of Kidz Online, and the steering committee for the Center for International Education in Washington, D.C.
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Heidi Rahn, Independent Consultant

Heidi is an independent consultant in sustainable development and social enterprise initiatives. She currently manages a new social enterprise for two nonprofit organizations in Portland, OR. Heidi recently finished her M.B.A. in Business and Sustainability at York University in Toronto. During her studies, Heidi was a founding member of York Sustainable Enterprise Consultants, President of Net Impact@York, and Research Associate for the Department of Ethics. Prior to completing her Master's Degree, Heidi spent five years as an environmental consultant in the utility industry.
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Amitabha Sadangi, International Development Enterprises, India (IDE-India)

Mr. Sadangi has spent 25 years in various aspects of rural development work. He is the founding member of IDE-India, and serves on its board. He has been selected to serve as the first Executive Director of IDE-India. He is passionate about the issue of poverty in India, and committed to a market-based approach to addressing their critical needs. In the same way that the poor suffer through "one-time only" subsidized programs, he believes IDE-India will suffer if it remains dependent on donations. Previously, he created a for-profit entity known as Global Easy Water Products Private Limited, which demonstrates the viability of enterprises that serve the poor. He holds a Post Graduate Degree in Labor and Social Welfare with an additional Degree in Law. Mr. Sadangi serves on the boards of several development organizations.
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Marnie Sigler, Omidyar Network

Marnie has worked in the private, public and social sectors. Before joining Omidyar Network, Marnie was Program Officer for Strategic Philanthropy at the William and Flora Hewlett Foundation. There, her responsibilities included strategic planning and evaluation, grantmaking, portfolio management, and operations and process improvements. Marnie's prior work experience also includes management consulting to government and commercial clients and technology investment banking in the U.S. and internationally. Marnie holds a Bachelor's Degree with honors from Princeton University and a J.D. from Stanford Law School. She is a member of the California Bar.
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Chuck Slaughter, The HealthStore Foundation

Chuck earned both a B.A. and a Master's in Management from Yale. He founded TravelSmith Outfitters, a direct marketer of travel clothing and gear in 1991, and built it into the #1 brand in travel wear, with over 2 million customers, and \$100 million in gross sales. In 2004, he participated in the purchase of two major apparel brands, Spiegel and Newport News (combined sales of \$500 million). He is a board member, and strategic advisor for the combined company. In the late 1980s, he served as a Program Officer for Trickle Up, which supports micro-enterprise development in over 20 countries. After his M.B.A., he worked on corporate strategy for Fortune 100 companies at Marakon Associates, a management-consulting firm. Today he divides his time between active investments in consumer companies and serving as the pro-bono president of the Sustainable Healthcare Enterprise Foundation (SHEF). SHEF seeks to improve access to essential medicines through its innovative microfranchise clinics in Africa. He was a recipient of Ernst and Young's Entrepreneur of the Year award. He currently serves on the boards of Spiegel, Environmental Traveling Companions, the Trickle Up Program, and SHEF. Chuck resides in Sausalito, California, with his wife, Molly, and sons, Cooper and Riley.
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Kevin Starr, M.D., Mulago Foundation and Rainer Arnhold Fellows Program

Kevin Starr is a proponent of a systematic approach to project evaluation and design that provides a more objective assessment of sustainability and the potential for growth to scale. Since 1993, he has worked with the Mulago Foundation to assemble an array of grassroots projects that focus on a sustainable future and consults widely on projects relating to the nexus of health, development, and conservation. Kevin teaches a course in international community health at the University of California at San Francisco School of Medicine and practices medicine on a part-time basis.

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Douglas Steinberg, The Lemelson Foundation

Douglas joined The Lemelson Foundation in April 2005 as Senior Program Officer. He is responsible for developing and supporting The Lemelson Foundation's international Technology Dissemination portfolio, as well as developing the Foundation's monitoring and learning system. Doug came to The Lemelson Foundation with 20 years' experience in developing countries in Africa and Asia. After serving as a Peace Corps volunteer in northern Cameroon, he worked with CARE, a leading international relief and development agency. Beginning in 1986 as a project manager with CARE in Niger, he later worked for CARE in Bangladesh, Mali and Angola. His professional experience includes emergency response, food security, health and HIV/AIDS, microenterprise development, policy analysis and advocacy. He was the CARE country representative in Niger from 1998 to 2002, and country representative in Angola from 2002 to 2005. He holds a Bachelors Degree in Political Science from the University of Michigan and a Masters of Science in Natural Resource Policy Analysis from the University of Washington.

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Arthur Wood, Ashoka

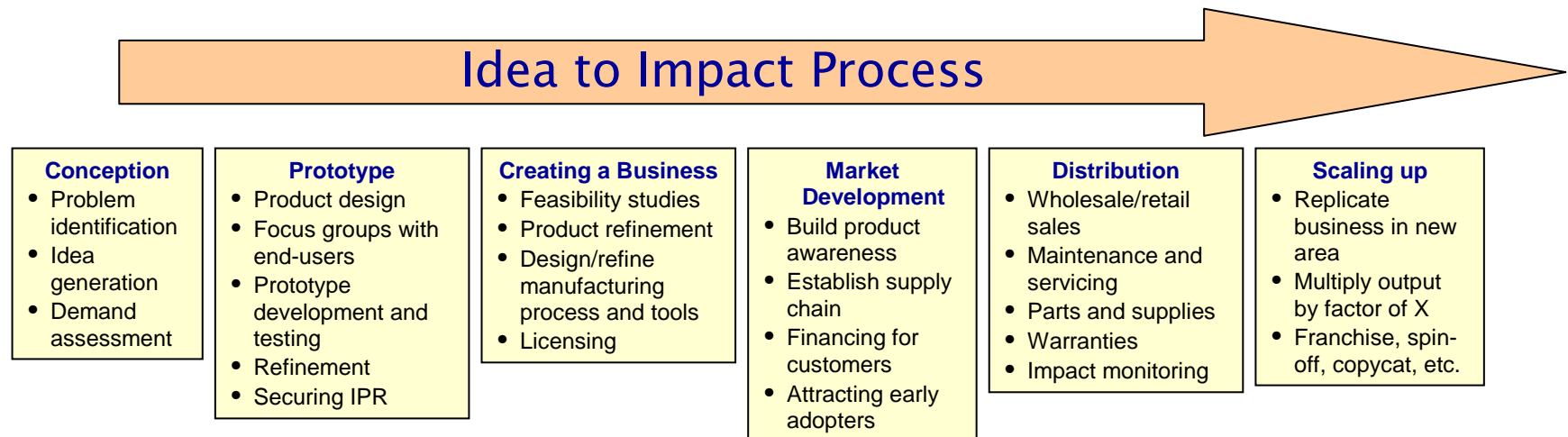
Arthur is an Englishman educated in the UK, France and Italy, married to a Norwegian, and trained by the Americans, last found working for the Germans. He now spearheads the Business Entry initiative as part of the Social Financial Services program at Ashoka. Their objective is to engage global financial-services firms to enter the business of social investing, and ultimately change the way investors view and approach social investing, as well as increasing the flow and efficiency of financing to the social sector. Prior to joining Ashoka, he worked for over 20 years in the finance sector, having held a number of senior positions in product development, change management, sales, and strategic marketing with companies such as Merrill Lynch and Coutts, the UK's oldest and most prestigious private bank. His last job was as a Director of a leading UK bank, Kleinwort Benson, where he headed up, re-engineered and managed the teams associated with product development across a whole range of financial instruments. He was also made head of e-commerce for the private bank, pioneering a model, described by McKinsey, as on the cutting edge of strategic web development, subsequently recommended as an industry-standard model by IBM. His experience in both private client and institutional markets has touched on most financial products, both vellum and exotic, including offshore fiduciary structures, alternative investments of all types — Roman Art, real estate, and hedge funds, as well as more commoditized investment products.

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APPENDIX D: IDEA TO IMPACT PROCESS MAP

Questions for resource persons (entrepreneur):

- **Innovations:** What were the most significant innovations that you developed to accomplish your goals at each stage of the idea to impact framework?
- **Lessons Learned & Challenges:** What were the greatest challenges you faced at each stage and how did you overcome them? What were your greatest learnings as you took your project through each stage from idea to impact?
- **Sustainability:** What contributed to the sustainability of the enterprise?



Discussion points for all participants (for each phase):

1) Financing:

- **Needs:** What types of financial resources did the entrepreneur require, what was actually obtained; how were the resources accessed?
- **Availability:** What types of financial resources are available at each stage; what type of funding institutions (e.g. multi-lateral development bank, traditional bank, foundation, etc.) and/or specific organizations are you aware of that might have funded particular stages?
- **Opportunities:** What else might be done to provide funding – can we work together?

2) Non-financial assistance:

- **Needs:** What types of other resources (training, mentoring, networks, facilities, etc.) did the entrepreneur require, what was actually obtained and how were the resources accessed?
- **Availability:** Which support service institutions (general type (e.g. business consulting, legal, etc.) and/or specific organizations) are you aware of that might have contributed meaningfully here?
- **Opportunities:** What else might be done to provide assistance – can we work together?

3) Knowledge management:

- What information is necessary to assess the potential and capacity of a social enterprise (and how do we obtain it)?
- What information is needed to facilitate ongoing management or strategic decision-making for program improvement?
- How can we measure and disseminate knowledge about program effectiveness and impact?
- Can we work together to fill the information gap?

IDEA-TO-IMPACT PROCESS: RESOURCE NEEDS, AVAILABILITY AND OPPORTUNITIES IDENTIFIED BY PARTICIPANTS

FINANCING

Needs:

- Front-end, high-risk investment
- Enhanced communication between investors and entrepreneurs
- Financing that supports social impact
- Financing for market-development throughout the process

Availability:

- Angel investors
- Grants
- Loans
- Philanthropy

Opportunities:

- Build the investor network and pool different types of resources available for experimental stages.
- Convene in-country investment forums throughout the world.
- Create a technology platform connecting social entrepreneurs with financial resources.
- Research various forms of investment and compare their social effects for optimal financing methods.
- Identify and map working capital available for each stage in the process.
- Improve visibility of market-development costs so they do not consume equity investment or slow organizational growth.

NONFINANCIAL ASSISTANCE AND KNOWLEDGE MANAGEMENT

Needs:

- Enhanced communication between investors and entrepreneurs
- Tracking mechanisms for impact measurement
- Nonfinancial technical assistance for entrepreneurs
- Case studies of successes and failures identifying social and economic impact
- Informal support networks up front
- Library of resources

Availability:

- Impact monitoring practices are being tracked by IFC.
- Various organizations have individual resource libraries.
- Grameen Foundation is partnering with Microsoft and Ashoka to create a network of social entrepreneurs and investors.
- Social Fusion is creating incubation pathway using pilot projects.
- David Green is developing a technology platform for networking and deal flow.

Opportunities:

- Create a technology platform connecting social entrepreneurs with financial resources.
- Improve tracking of social enterprise-impacts.
- Encourage foundations supporting entrepreneurs to provide access to informal support networks in the early phases.
- Create the incentive for entrepreneurs to share their failures via formal documentation others can learn from.
- Pool financial resources to provide customized training and assistance as needed by the different enterprises instead of creating generalized programs.
- Create a library of resources.

APPENDIX E: DEFINITIONS OF KEY TERMS

The following definitions were submitted by Oliver Karius, Vantage Point.

Corporate Sustainability: Corporate Sustainability is a business approach to create long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental, and social developments.

Sustainable Development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable Investment: Sustainable Investment means developing effective mechanisms and building capacity in the financial markets and economic systems to contribute to the creation of an environmentally sustainable and socially responsible economy and thereby to promote sustainable development.

Sustainability: Sustainability is a systemic concept, relating to the continuity of economic, social, and environmental aspects of human society. It is intended to be a means of configuring civilization and human activity so that society, its members, and its economies are able to meet their needs and express their greatest potential in the present, while preserving biodiversity and natural ecosystems, and planning and acting for the ability to maintain these ideals indefinitely. Sustainability affects every level of organization, from the local neighborhood to the entire planet. It is an evolving topic that can help us shape our future.

Sustainability Research: Sustainability research embraces systemic, holistic, diverse and nonlinear thinking by recognizing the dynamic, complex, and interdependent nature of environmental, human, and economic systems. Understanding the source of problems by recognizing patterns rather than merely dealing with symptoms is central to systemic and long-term thinking.

The following definitions were submitted by The Lemelson Foundation:

Entrepreneur: One who organizes, manages, and assumes the risks of a business or enterprise. “An individual engaged in the process of starting and growing one's own business or idea.”
(From The Public Forum Institute web site, www.publicforuminstitute.org)

Innovation: Conversion of an original idea, product, or service to a widely accessible and adopted form.

Invention: A new idea, product, or service.

Social Entrepreneur: “Just as business entrepreneurs create and transform whole industries, social entrepreneurs act as the change agents for society, seizing opportunities others miss in order to improve systems, invent and disseminate new approaches and advance sustainable solutions that create social value.”
(From the New Heroes web site, www.pbs.org/opb/thenewheroes).

“Social entrepreneurs identify resources where people only see problems. They view the villagers as the solution, not the passive beneficiary. They begin with the assumption of competence and unleash resources in the communities they're serving.” (David Bornstein, author of *How to Change the World: Social Entrepreneurs and the Power of New Ideas*). “The job of a social entrepreneur is to recognize when a part of society is stuck and to provide new ways to get it unstuck. He or she finds what is not working and solves the problem by changing the system, spreading the solution and persuading entire societies to take new leaps.” (From the Ashoka web site, www.ashoka.org).

APPENDIX F: BACKGROUND READING AND CASE STUDIES

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