

Ian C. MacMillan's Prize Lecture: Social Wealth Creation via Entrepreneurial Philanthropy

*1999 Award Winner**

Governments and philanthropists in the United States and other rich nations spend billions of dollars each year supporting philanthropic causes that attend to the manifold social problems of the world. Some of their efforts – perhaps on the order of hundreds of millions of dollars each year – go toward supporting start-up firms and small entrepreneurial businesses, a strategy linked to the belief that the creation and growth of new enterprises fuels the growth of the economy, particularly through employment. To date, however, few people have considered the role that entrepreneurial activity can play beyond improving employment. Based on our research, we contend that such activity can directly confront social problems and create new societal wealth.

This paper reports on the launch, at the Wharton Societal Wealth Program of a longitudinal research program of social interventions based on Entrepreneurial Philanthropy. Entrepreneurial Philanthropy is the use of philanthropy to create experimental entrepreneurial firms that attack social problems. Specifically the program focuses on using entrepreneurial experiments to attack health problems in Africa, but success of these pilot programs will be the seeds for expansion to other developing economies.

The concept of Entrepreneurial Philanthropy originated when the author received the FSF Prize and was thinking about how to best deploy this windfall. The deployment of funds to seed Societal Wealth Enterprises emerged, and the funds were deployed to creating the Entrepreneurial Philanthropy program at the Wharton School.

Before discussing the specific Societal Wealth Enterprises we researched, let us first begin with a review of how, other than job crea-

tion, entrepreneurship creates societal wealth.

Productivity enhancement: Many entrepreneurial efforts result in significant enhancement of productivity, often starting at the regional level and then extending to the national level. The creation of Sun Microsystems for instance, massively increased the productivity of engineers, scientists, project managers and researchers, first in the US, then globally.

National competitiveness: At an aggregate level, the cumulative effects of entrepreneurial activity add to a nation's ability to compete with other nations.

Quality of life: Many entrepreneurs, particularly in the US, are seizing upon opportunities to create business ventures that focus on improving consumers' quality of life. This enhancement of quality of life manifests itself in several major forms:

- *Enhanced national health* in the form of better ways to treat, diagnose and prevent illness via products that promote improved wellness and life extension and vastly superior devices for the physically and mentally disadvantaged.
- *Improvements in quality of work life* created by the development of new products and equipment that increase worker safety as well as allow employees more flexibility to work out of their homes or from remote locations.
- *Enhanced national education, training and learning* using technologies that dramatically improve the quality of the workforce, with concomitant gains in national productivity.
- *Enhanced efficiency of government services* in which entrepreneurial providers of information and telecommunication systems dramatically increase the quality and availability of services.
- *Personal wealth creation leading to philanthropy*. Entrepreneurial success often positively influences societies by creating philanthropists, whose huge infusions of philanthropic funds into areas like the arts (Guggenheim/Getty museums); medical research (Mayo clinic, Bill and Melinda Gates Foundation); and social welfare (Tur-

* It was not until 2003 that the Award Winners were formally requested to give a Prize Lecture in connection with the Award ceremony. Therefore, in cases where the lectures were missing the Award Winners were invited in 2008 to deliver a belated Prize Lecture in the form of a manuscript. This essay by Professor Ian MacMillan was delivered in August 2008.

ner Foundation) provide critical resources that the public sector either cannot provide or cannot adequately support.

Societal Wealth Creation through Entrepreneurial Philanthropy

Coupling this last societal wealth benefit (philanthropy) with the other benefits of entrepreneurial activity creates an opportunity to deploy entrepreneurship research in a radically new way. We can deploy philanthropic seed funds to create entrepreneurial "experiments" to conceive of, plan for and create enterprises that are designed to profitably attack social problems. In doing so, Societal Wealth Enterprises can serve as an alternative to current ineffective and enormously wasteful public sector initiatives.

The basic thesis is that many social problems, if looked at through an entrepreneurial lens, create opportunity for someone to launch a business that generates profits by alleviating the social problem. In essence, it is a shift in activity from the public domain – governments and non-governmental organizations – to the private domain – businesses and private individuals. This sets in motion a virtuous cycle: the entrepreneur is incented to generate more profits and in so doing, the more profits made, the more the problem is alleviated.

Oftentimes this process is obstructed by two major obstacles: low profitability and the resultant lack of seed funding. This is where the entrepreneurial philanthropist comes in. If philanthropists endow the seed funding for Societal Wealth Enterprises, in many economies, particularly developing ones, it should be possible to attract local entrepreneurs who are quite happy to live with the smaller profit streams eschewed by their counterparts in more wealthy economies. A powerful appeal to the philanthropists is that their contributions have a chance to remove problems rather than to simply alleviate them, and the associated recurrent "annual tin cup" dependencies

Ideally, the injection of seed funds into pilot entrepreneurial projects will set in motion the first entrepreneurial business, which, if successful, plants the seed for follow-on entrepreneurial initiatives.

Like all entrepreneurial efforts, however, success is not guaranteed. In fact the cynic might argue that if there were an obvious entrepreneurial solution, an entrepreneur would already have found it! This is where the third component of Entrepreneurial Philanthropy kicks in. Our position is that we may be able to mobilize the talents of universities and business to undertake a new mode of research via entrepreneurial experimentation – to conceive of, design and plan Societal Wealth Enterprises and then recruit local entrepreneurs to launch and manage them for the profits they can make, which though small by developed economy standards, can be perfectly adequate by the local entrepreneur's standards.

Entrepreneurial Philanthropy is already being undertaken by the Wharton Societal Wealth Program. Below we describe several major programs at the Entrepreneurial Philanthropy Program at Wharton. The Program has conceived of possible social entrepreneurial solutions, developed business plans and then seeded the formation of a pilot business to implement the solution as a social experiment, learning and redirecting the pilot business that emerges as reality unfolds the real opportunity.

Livestock Feed Production

Objective: To increase the quality and production of livestock in emerging economies in order to make available higher quality, lower cost protein.

Pilot Program in Northern Zambia: Advanced mathematical techniques using linear programming, that have been developed as solutions to the optimal feed mix problem plaguing feed and livestock producers in emerging economies, are typically inaccessible to small-scale producers. The WSWP has developed a simplified version of more sophisticated programming techniques, which also incorporates data about locally available feed components to address this problem.

The business retained its position in the market and reported very healthy earnings for fiscal year 2007 despite growing competition and increasingly challenging food commodity prices and availability. Profitability was recorded at the highest levels since its founding and the company continues to set the pace within the Copperbelt region of Zambia. Quality levels of the feeds are considerably higher than competitive feeds, which has forced other suppliers to increase quality without increasing cost. As a result the customers, and ultimately the consumers, in the entire region are benefitting.

Last year we reported the impact of a new pelletizing plant. This equipment continues to provide considerably enhanced quality product with lower levels of wastage in consumption / utilization. Relatively frequent power interruptions have required the installation of a large diesel generator to run the plant. This, of course, raises operating costs. Employee levels are constant at approximately 120 full-time staff and 60 part-time workers. The number of small-scale customers / farmers has grown to between 1,000 and 1,400 in any given month. At current levels of production this facility supports the production of approximately 8 million daily protein servings.

In our last report we indicated that we were working on a feasibility plan for the replication of this business at 10 new sites. This has begun and then put on hold at the request of our client. Success of current operations and associated growth challenges means they cannot dilute their attention at this time. We believe it important to have their expert input before seriously considering other sites.

Livestock Production: Widows and Orphans Scheme

One of the most exciting possibilities we are confronted with is an extension to the feed producing activity. As a consequence of mining accidents in the Chambishi area an outgrowers scheme was launched (by a 3rd party) to enable widows of deceased miners to produce poultry in order to support themselves and their children. The feed company provided training and inputs to widows and orphans who raised the broiler chicks to maturity. Birds were then collected, sold at market, and profits less costs distributed to the growers. Demand for participation in the scheme was extraordinarily high and scheme managers experienced highly visible political interest as well as support from local authorities who enjoyed reduced pressure from the unemployed widows for support. Unfortunately the project manager absconded with approximately \$250,000. At the request of Bill Holekamp we are building an investment case for a renewal of the program and potentially the establishment of a fully-fledged poultry processing facility. During the next few weeks Jim will be travelling to Zambia to assess various assumptions and meet with relevant authorities.

Recently we have been in touch with a Wharton Graduate based in Kenya who is interested in partnering with us in the building of a feeds plant in Nairobi. .

Current Challenges

- Food commodity prices have increased worldwide in recent months. Combined with the price of oil we are facing enormous inflationary pressures. When and how much this will impact poultry operations remains to be seen.

- Energy supply in Southern Africa is becoming an increasingly difficult factor to contend with. Regular power cuts, due to South Africa's failure to maintain their electricity grid and invest in generation capacity to meet increasing demand has left the region short on power. Private sector electricity production initiatives have grown tremendously. Such additions are predominantly fossil fuel based further increasing demand for petroleum and diesel fuel.

HIV/AIDS Program

Objective: To increase the quality of healthcare in resource-poor settings with an initial focus on the employment vitality of HIV/AIDS infected workers.

Pilot Program in Botswana:

This country's impressive economic gains are threatened by one of the world's highest known rates of HIV/AIDS. The goal of the program is to use software to enable nurses and doctors to deliver diagnostic and prescriptive services to more HIV patients and dramatically increase the quality of care.

In our last update we reported a combination of progress and difficulties with this initiative. We are pleased to report that with a further commitment of funds we were able to secure full-time programming support which has had a significant positive effect.

As of January 2008, 13,700 patients have been entered into the Electronic Medical Record (EMR), we are completing training of clinic staff, and building the first aggregate patient reports for clinic management.

In the previous report we noted the NIH/CFAR study for which we received a pilot grant. After considerable bureaucratic delays we received authorization to start from the Botswana Ministry of Health, and launched patient recruitment activities in May 2008. The objectives of the study are as follows:

- Aim 1: To measure the effect of cellular phone text message refill and visit reminders on HIV drug therapy adherence.
- Aim 2: To measure the effect of cellular phone text message reminders on visit adherence.
- Aim 3: To measure the effect of cellular phone text message refill and visit reminders on HIV viral load suppression and change in CD4 count.

Worth noting is that we have been approached by the UPenn

Medical School research program in Botswana. They are creating a research facility in Gaborone and have enquired as to the suitability of our EMR as a clinical research database. We hope to secure such research activities as paying clients of an entrepreneurial entity built on the EMR. Such support (and income) might provide 1) the clinical credibility of a more comprehensive decision support system, and 2) income with which to continue the development and testing of such a system.

Current Challenges

- Until recently Botswana has enjoyed very stable power supply but has now also been impacted by South Africa's power crisis. In order to keep the EMR and NIH study running we may be obliged to purchase a gasoline-run generator.

- The project has reached a point where it now requires professional, full-time, on the ground programming support. Such input is more expensive than our budget allows.



Formerly unemployed women packing new Khaya cookies for shipment.

Khaya Cookie Company:

(www.khayacookies.com)

Objective: To provide employment to underprivileged women as well as transferable life and employment skills.

South Africa: Since 2004, the WSWP has assisted a start-up cookie company in the Cape Province of South Africa. The founder of the business built the company to provide employment to underprivileged women as well as provide them with transferable skills they could use to earn a living.

Khaya is making good progress after being funded by Bill Holekamp (WG72). The product line has expanded to include nutraceuticals and shelf life has been extended without the use of preservatives. A distribution partnership has been established outside Philadelphia and the first major retailer has committed shelf-space in a number of their stores beginning the last quarter of 2008.

The entrepreneur, Alicia Polak, has been invited to exhibit at the premier New York Fancy Food Show June 29 – July 1 (<http://www.specialtyfood.com/do/fancyFoodShow/LocationsAndDates>). Given the nature of the event, we have great expectations of Alicia and the event.

A number of other gourmet retailers have committed to purchasing once the goods arrive on US soil. The first container of product will arrive in New York mid-July. The new website for online sales will be ready just prior to the show (www.khayacookies.com).

Worth repeating is Alicia's 1st place in the inaugural Food Network Awards under the Edible Entrepreneur category:

http://www.foodnetwork.com/food/show_aw/text/0,3151,FOOD_28456_61089,00.html

It remains her intention to expand the business to benefit larger numbers of unemployed men and particularly single mothers.

Johnny Money Online Game

We are working with NFIB to develop a computer game that simulates the start up and operation of a small entrepreneurial retail business. This will be played by high school students and teach them the fundamentals of business in a way that is “seductive” – which means it must have a huge fun component. Our particular objective here is to begin offering it in ghetto schools in the USA, where the focus is on increasing employability. Kids that are currently being betrayed by the US education establishment will get training in what a business is like and understand what an employer is looking for when they get their first jobs (if they are lucky enough to land one). Eventually we hope to take this game to other Anglophone countries.

Projects under Investigation

A number of the projects outlined below are works-in-progress very much dependent on the limited resources available. We continue our interest without on-the-ground engagement until such time as we have the entrepreneurs and funds available to execute.

Aquaculture: Malawi

Malawi is a Southern African country with a population of approximately 13 million. Increasing corruption, population growth, increasing pressure on agricultural lands, and the spread of HIV/AIDS pose major problems for the country.

The WSWP is investigating the launch of an aquaculture program to increase fish production in the nation and reduce pressure on the natural environment. It is envisioned the program will emulate some of the characteristics of the animal feeds project in Zambia, thereby providing evidence of replicability of such projects.

Fish Feed Production: Malawi

An added incentive to set up the aquaculture project is that there may be an opportunity to replicate the Zambian animal feed production facility. Research has indicated a technology and investment need for the production of animal feeds, in particular affordable, consistently high-quality feed for commercially produced fish.

Small-scale Agricultural Substitute for Tobacco Production: Malawi

In an attempt to identify possible small-scale agricultural products as replacement for declining tobacco production and prices, the WSWP is investigating possible substitutes such as essential oils and other plants extracts for regional and international markets.

Animal Feed plant: Kenya

We are holding discussions with a Kenyan Alumnus who is interested in replicating the Zambian feed project in Nairobi.

Summary

How do we help the world's poor? Handouts seem to have failed. In fact, the 2005 G8 Summit is focused on debt relief, a sign that financial aid has not been as successful as originally hoped. Perhaps the old proverb needs to be replaced with the following: -- give a people fish and they soon go hungry, teach them how to fish and they will fish out the lake, help them to build fish farms and they will eat fo-

rever – this represents a viable option in today's world. We believe that business, particularly entrepreneurial endeavors, have a clear role in alleviating societal woes, yet the costs involved are often too high for the average entrepreneur to undertake.

In response to this WSWP is doing experimental research along the lines of “Entrepreneurial Philanthropy,” where philanthropists fund research – conducted by universities into companies that in making profits also alleviate social ills.

Once the university researchers have identified potential business opportunities – like the animal feed plant that can be applied in other countries – the philanthropists will once again help out by funding pilot programs that will eventually pave the way for larger-scale roll-outs. With these foundations in place, local entrepreneurs can pick up the ball and run. Ideally these projects will spark other businesses, starting a cycle that will do more than simply create jobs, but rather help increase the social wealth of a society.