It is early morning in rural India, 40 miles southwest of Vellore, in the state of Tamil Nadu. 28-year-old Mahalakshmi is walking barefoot in the dewy grass to wake her husband in the shed where he has been all night, watching over the 3,000 chickens she and her business colleagues are raising commercially. She offers him food and water, and as he sets off to work in the fields, she is joined by two more women in the vast, airy, bamboo and thatchedroof shed. The women have work to do. In 12 days the chickens have to be ready for delivery.

The sun is also rising over Old Municipality Road in Vellore. In the minute space of their roadside snack shop Saraswathi and her friends are cooking. Soon, drivers and construction workers will be coming to buy idly, dosai, and tea—sweet and milky, the way Indians drink it.

A couple of blocks away, Kotiswhari and her colleagues are opening the door of the shed that houses their jute-bag business. Looking into the dimly lit shop, you can see the fine stitching and trendy cut of a bag that one of the entrepreneurs has just brought out. The elegance of the work takes your breath away.

Eight years ago, statesmen and stateswomen from around the world gathered at the United Nations headquarters in New York City to commit jointly to setting the world on a new path. Confronting the appalling fact that three billion people were then living on less than two dollars a day, they pledged to act together in order to halve severe poverty around the world by 2015 and eliminate it entirely by 2025. They envisioned incomes growing among the poorest; children going to school rather than laboring at looms and in quarries; women being given the same opportunities as men; health care improving for all; and solid strides being made toward environmental sustainability. The title given these aspirations was the Millennium Development Goals.

On September 25, 2008 world leaders will again gather at the United Nations headquarters. On that date they will renew the commitments they made eight years ago. Ample good intentions will again be the order of the day.

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Yet all will also recognize that progress in their mission has been slow. Three billion people still live on less than \$2 a day. Despite the substantial resources devoted in the past eight years to attaining the Millennium Development Goals, they remain far off.

In this context, it is fair to say that the existing, tried-and-tested methods have not been entirely successful. It makes sense to consider some alternative approaches. To achieve the Millennium Development Goals may well require some new Millennium Methods.

This essay focuses on the efforts of Hand in Hand, an organization with which we are both affiliated, which has developed one such alternative approach. In less than four years, with total funding of US\$15 million, Hand in

To achieve the Millennium Development Goals may well require some new Millennium Methods. Hand has mobilized more than 300,000 women in business training and microcredit activities. These women have so far started or expanded some 170,000 enterprises. They are presently starting 10,000 new businesses per month. Combining in a novel way elements of micro-lending, skills training, and the organization of self-help groups, Hand in Hand has reached

out to women such as Mahalakshmi, Saraswathi, and Kotiswhari, whose stories are told above. The women, in turn, have reached back.

For the clients of Hand in Hand, "empowerment" is not a goal. Rather, it is a reality they embrace every morning and live every day. A few years ago they were trapped within walls of poverty caused by illness, appalling working conditions, and invisible or lack of opportunities. Now they are owners and operators of thriving small businesses, reaching out toward higher incomes and better futures.

HAND IN HAND: PERSONAL PARTNERSHIPS FOR DEVELOPMENT

Hand in Hand focuses on creating jobs for poor women. The organization has its main hub in Tamil Nadu, and employs some 4,000 people with 17,000 additional volunteers. Hand in Hand sets women off in enterprise building through three steps. It connects the women in self help groups, provides microcredit after the women have proven they can save, and then trains them in finance, entrepreneurship, and marketing. Four additional programs address other critical problems: children who are not in school, the lack of health facilities and sanitation, India's neglected environment, and the digital and democratic divide. In all these programs the key is help to self help. The women's program works as the main driver

Why Women?

As studies by the United Nations and other organizations have found, women's economic positions are affected by their lack of access to productive resources. A poor woman has less ability to purchase needed improvements in housing, education, and health. She has less bargaining power in the family and community, and less ability to fend off violence.

Access to finance has been deemed essential if women are to leverage their time and talents, and transform themselves, their families, and their communities. In most of the developing world, women manage the household finances. As more cash and assets get into the hands of women, most of these earnings go towards feeding their children, and become medicine and schoolbooks for their families.

Global experience with micro-credit show that women are better borrowers than men; they are judged to be honest, practical, and reliable. Access to credit enhances a woman's status in the community and enables her to build income and assets that are clearly her own. Even when the husbands do get involved, they are usually employed as laborers in the family business.

into the poor communities, as it empowers the women and prepares the ground for further awareness about children's education, health, environment and the world around them. The programs support each other and attack poverty in a holistic way. [See Text Box: "Why Women?"]

Dr. Kalpana Sankar, a nuclear physicist turned specialist in micro-lending and training, leads the Hand in Hand team. She is now exporting the organization's methodology for fighting poverty to South Africa, Afghanistan, and other countries. In the West, Hand in Hand is supported by a strong network of entrepreneurial and corporate people, in addition to some governments and foundations.

HAND IN HAND'S NEW APPROACH TO CHANGE

Hand in Hand's innovation lies in the "how" of our work: turning low-caste, poor, undernourished, sometimes sickly women into serious family providers and even businesswomen, then scaling up that approach to reach millions. [See Text Box on following page: "A 'Shining' India is Far Off"]

The academic literature describes the fertile soil needed to create enterprises as containing an abundance of financial capital, knowledge capital, and social capital. However, when they start out, Hand in Hand's women have none of those.

Many left school early to work at looms or in the rice fields. About 85 percent of these women are illiterate, and have little awareness of the world around

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A "Shining" India is Far Off

India has 300 million of the world's poorest billion people. They live far from the "Shining India" of the country's last election. Some of them gather in the endless slums around the mega-cities, but the majority live in rural areas or smaller cities. Tamil Nadu has 62 million people, and 15 million of them live in abject poverty. Its capital is Chennai, the old seaport of colonial Madras, the garment capital of India, where new IT companies and a booming animation industry are driving rents sky-high along the leafy boulevards.

Around rural and semi-rural Tamil Nadu, where Hand in Hand is most involved, most people work in agriculture, as daily laborers in the fields or at quarries, or on and off in simple manufacturing or services. Parasites, TB, and malaria cause anguish in a world of few doctors, where the diseases are not only undetected but also unnamed, the poor only pointing to their "pain." The lack of food and of nutritional variety deprive people of protein, essential oils, and micronutrients. A third of the children are undernourished, with 18-year-olds looking like Western 11-year-olds. Almost 60% of the people have no access to flush toilets. Children can be sold into labor at age 8 by parents who have no other source of income. Piles of garbage sit outside homes; a stinking river nearby may be full of household waste. Electricity is scant, and monkeys swing from the equipment at the power stations. Rural roads twist and turn at every large rock or pool of water.

For Saraswathi, the woman at the roadside snack shop, starvation awaited her family when her husband, a truck driver, became ill. Mahalakshmi, the poultry farmer, worked as a daily laborer, lining up each morning with other *kulis* to find work in the rice fields, work that is only available 10 days a month at a pay of 75 cents per day. Some of the other women were working in appalling conditions at a local cigarette factory. They all had little prospect of ever escaping poverty. Other women were abused, wailing softly at night, enclosed in their homes under the total control of their husbands.

This was the world of these women, surrounded by the insurmountable walls of poverty. But it was not a life without dreams, especially those strong dreams for their children: a good education, especially for their girls. These girls were going to get a different life, said Jayakanthi, mother of three.

them, as they cannot even read the timetables for the bus to town, let alone a newspaper.

Their access to capital is limited to money lenders, who charge interest of 100% to 150%. Such loans create debt traps that can last for generations, and the suicide rate among Indian farmers is 10 times higher than in the Western world.

As for inner confidence and supportive social surroundings, these impov-

Getting the Men on Board

For Mahalakshmi and her five colleagues in the self-help group, it is the husbands who take the lonely night shifts at the poultry unit, where by night thieves or animals present unwanted threats to the chickens.

For another group of women, Hand in Hand helped turn an old family skill into a new business. The women used their husbands' muscular strength and skills to set up a women-owned business making brass vessels, with their husbands as employees.

Brass vessels have a huge market in South India, as symbols of wealth and for use in temples and worship at home. But this did not necessarily translate into wealth for the skilled vessel-makers who were paid as little as 50 rupees (US\$1.19) a day for their labor by the merchants who both supplied the alloy sheets and bought the finished vessels.

The women of these families were frustrated by the endless poverty, and decided to join Hand in Hand. When they understood how loans were structured for medium-sized enterprises, they realized this could be their way to start over. They had the skills in their families; all they needed was a leg up.

They raised 200,000 rupees (US\$4,744) from Hand in Hand, and an additional 100,000 rupees (US\$2,372) as a loan from REPCO Bank. With this capital, the entrepreneurs bought alloy sheets, polish, and other material and set up their businesses. The women now run the businesses and market and sell the vessels, with their husbands employed to handle heavy hammers in heated small manufacturing units.

erished women have even less. Hand in Hand works among the more than 400 million Indians who stem from the so-called Backward Castes, Most Backward Castes, Dalits (untouchables) and Tribals. In the complex structure of the Hindu caste system, being low caste traditionally means being born with a sense of lowliness. And the women bear the brunt of this system. They eat last and own less, yet do 80 percent of the work. Some of them are widows, and are stigmatized within traditional Indian society, where people still remember the *suttee*—widows being burned live alongside their deceased husbands. [See Text Box: "Getting the Men on Board."]

Hand in Hand has attacked all these challenges systematically, by creating the frameworks and a fertile soil for the drive of many women, including the three-step cornerstone mentioned earlier: self-help groups, extensive training in entrepreneurial skills, and micro-credit.

The Crisp Bakery

Eight members of a self-help group started the Crisp Bakery some years ago. It staggered rather badly in the initial months. There was no income except from local door-to-door sales of buns. But the women soldiered on, supporting each other, learning that these months were a period during which they honed their baking skills and learned to bake a higher quality of products than when they started. The breakthrough came when Hand in Hand was able to link them to Intimate Fashions, a local garment industry. The Crisp Bakery got a daily order of buns for the employees of the factory and office on a trial basis.

The women have repaid all their loans, and now work with a disciplined team spirit: Vanalakshmi and Lakshmi are in charge of actual bakery operations while Sheela looks after the marketing and PR.

Today, the bakery is starting to make a real profit. Their clientele extended further when Ennore Foundries placed weekly bulk orders. As orders started increasing, the bakery was already running to capacity. They felt the need to buy new equipment and hire more staff. So they bought a gas oven from Chennai and hired women from other SHGs. Salcom Ltd. became a client after learning about Crisp Bakery from Intimate Fashions. The newest client is Triumph, a local company.

Self-Help Groups

In India the self-help group (SHG) is now an old concept for helping women save money. Poorer women needed to save, but could not save in banks, as the transaction cost on each account was too high. However, the banks would accept the total savings of a group, and thus the SHG was born.

Hand in Hand has put a new spin on the SHG. It brings together 15 to 20 women, after a participatory assessment of the village, where the villagers themselves rank all households on a socioeconomic scale. Then, those closest to each other on the scale will be put together. The women need to resemble each other socioeconomically, as rapid formation of trust is key to their success. If the differences in household income are too large, the economically stronger women will dominate the group.

The group works together to save, keep accounts, train, and borrow money together under the auspices of a leader they have chosen among themselves, and a Hand in Hand coach. They meet without fuss. The spot under the village tree will do just fine. Their kids are in their laps, the sun is setting dramatically, and mosquitoes are humming. This is a board meeting at ground level.

The coach will train them in literacy and numeracy. It takes the women only 150 days to become readers, even though they meet after long work days. Some 75,000 women are trained per year. How do they do it? The key is probably their extremely high motivation. Cognitive research shows that learning is accelerated in highly motivated students.

The numeracy is essential for the financial training that now follows. To start a business you need to be able to count your interest rates and subtract and divide. In the entrepreneurship training, knowledge in production, sales, marketing, pricing, and customer support is combined with knowledge about how to hire and work with others.

But hard facts are not enough for mental change. The women are also trained in self-awareness and personal leadership. They discuss their possibilities as businesswomen and as human beings, often giggling nervously as they come from a world where no one really talks much about these things. A large variety of pedagogical methods are used to create self-insights, bind the group together, and teach them to work as teams. They are also taught about the larger framework they operate in, and told about their individual rights as women and human beings.

All this together brings about a fundamental shift in the women's attitudes. They go from feeling like a person left behind to gradually putting themselves at the steering wheel, seeing themselves as women of strength. [See Text Box: "The Crisp Bakery"]

Entrepreneurial Training

Today Hand in Hand employs some 900 trainers, who specialize in supporting the women in creating enterprises. Half of them have a college degree in either business or agriculture; others come from the local community or have NGO backgrounds. These trainers are experts in setting up the self-help groups, and they support the group when they are getting loans and establishing enterprises.

Currently, Hand in Hand is enrolling 10,000 more women per month, and the number of new and expanding enterprises is also 10,000 per month. The medium-term goal is to cover 6,000 of the 29,000 villages in Tamil Nadu, creating 1.3 million jobs.

The speed of growth might also be explained by the way Hand in Hand gauges productivity at the employee level. The number of groups formed, the rate of enterprise creation, and the rate of medium-sized enterprise creation are all measured according to set targets. "What gets measured gets done" is an old adage from the business world, and Hand in Hand is applying it in the aid world too. [See Text Box: "Selling Stationery"]

Microcredit

Small loans form the third aspect of Hand in Hand's enterprise creation. In the fall of 2006, Bangladeshi Professor of Economics Muhammed Yunus was awarded the Nobel Peace Prize for his revolutionary innovation. It took many years to develop

Selling Stationery

Another group of women started a stationery production business. The question was how to target the market. After doing an evaluation with Hand in Hand, they realized that the best market was for office paper. They started production and soon approached all the local government offices to advertise their products. They quickly had a breakthrough, receiving bulk orders from all the schools in the nearby city and from several banks. Hand in Hand has become a customer itself, buying office stationery for all its 14 districts from this unit.

An innovative marketing strategy has also been a feature of this group. For example, to popularize their products, they put up stalls at large festivals. Now, the women plan to expand their market to shops and retail chains both local and in Chennai. A challenge is the logo that most firms want printed on their bags. The entrepreneurs are thinking of linking up with a printing unit and have asked Hand in Hand to help them search for one. This would require new loans, which makes the women take a hard look at their possible returns. And they have other plans. They want to carry the designer paper used for custom-made gift bags in lifestyle products stores. Such paper is not available locally, so they need help to locate a source.

They have received requests from hospitals that want to reduce their production of toxic wastes, and European firms that want to promote the use of bio-friendly paper bags have asked for samples and quotations. Whatever the challenges, these entrepreneurs are willing to face them head on.

his Grameen Bank model, and Hand in Hand has found that a mix of his principles with those of the SHGs is most effective among its members.

This is a savings-driven approach: the women have to save first to borrow later. The savings are very small, maybe US\$8 a month. They position the women for credit ratings and loans, with both regular banks and Hand in Hand itself. These loans are given at regular interest rates. Amortization is 10 months for smaller family enterprises, while larger enterprises are given 23 months.

Note that the SHG savings will not be kept in a bank account; instead, the money will rotate among the group members as loans, and the books of accounts will serve as proof of the group's total savings and financial conduct.

It is important to stress that neither Hand in Hand, nor the banks, ask for any traditional collateral from the group members. Instead, their books of accounts replace collateral, serving as a guarantee that the group is able to save, take out loans, and repay them on time. In addition, the external loans are not given to individual group members, but to the SHG as a whole. The members then become jointly responsible for the repayment; clearly, peer pressure will apply if one member fails to repay.

Yunus' great innovation was using this social collateral, as no material back-

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Raising Poultry for Profit

At the poultry unit, Mahalakshmi and her colleagues used a combination of borrowing and investing their own saved capital. They borrowed 100,000 rupees (US\$2,372) and contributed the same amount themselves to invest in constructing their shed. The investment was low risk, as the company they contracted with provided food for the chickens and promised to buy all the chickens after a growth cycle of 42 days. The women get paid 3 rupees per kilo of chicken, which is considered a high price—it came after intense negotiations which the women handled themselves. The only unknown involves the mortality rate of the animals; last month, 10% of the chickens died after intense monsoon thunderstorms swept by, and the birds became frantic and collapsed into each other.

Despite this setback, Mahalakshmi and her colleagues are continuing to breed entrepreneurship around them. A few hundred yards down the old village road, two sweaty men in dhotis and t-shirts are constructing four new poultry sheds. Nearby stand 16 poor women who loudly discuss the project, pointing instructions to their husbands. These are women from two other SHGs; inspired by Mahalakshmi, they are now starting their own poultry farms. They are planning for large-scale animal rearing, and their leader, the charismatic Ramatelagal, stands with a straight back, beaming at the achievements. Clearly, entrepreneurship can be contagious once you give people the right tools.

up was available to the women, and to teach creditors to tap into the cash flow of the poor by collecting interest at small intervals.

The microloan is a valuable tool in the toolbox, but it is not the only one. Used on their own, such loans can speed up consumption and create debttraps, as the poor have so many unmet needs. The needs for schoolbooks, medicine, housing, dowries, and sometimes even jewelry create an urge to borrow to buy. Or worse, the women borrow and their men spend, enforcing old gender stereotypes, especially as the women have to pay back the loans.

Hand in Hand sets guidelines for the women: the money must only be used as an investment. If the roof is leaking they can instead borrow from the savings capital they have generated themselves in their groups. Also, by now, the women have started some 50,000 enterprises without taking out any loans, and often loans are combined with their own savings. [See Text Box: "Raising Poultry for Profit"]

BUILDING SUSTAINABLE BUSINESSES

Do the businesses Hand in Hand creates stand the test of time? The project is still in its early days, but so far the payback rate is 99.6%. Half of all loans taken out are

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Helping Entrepreneurs Get Started

Kotishwari, a busy mother of three, was skilled in cutting jute fabric and stitching it into bags and wallets. Always more a hobby than a vocation for her, jutebag making had the potential to generate income but she never knew how to scale it up. But once in the project she took out one small loan to buy one machine, and began to make bags for local orders. The clients would come in and gush over her bags, then leave without making larger orders, as they knew her one-woman business would not be able to manage larger numbers. She became increasingly frustrated.

Hand in Hand helped her find four other women to train. Soon they wrote a water-tight business plan, got a loan, and could start a larger-scale production.

With the money they borrowed, Kotiswhari and her colleagues constructed a shed, and bought a screen-printing unit and two electric sewing machines. Business caught on fast, as many people knew of Kotishwari and her bags. Bulk orders came during the wedding season, school reopenings and the festivals.

The women today make profits of around US\$200 to US\$250 a month, after paying off their loans and expenses. Thus, each takes home around US\$50.

Discussing future plans, the women talk of upgrading the printing unit. Kotishwari also wants to train and employ more women so that they can manage larger orders during the peak season. The zealous entrepreneurs now want to go into the big shops in the cities. They are hiring agents to take them there, which is proving challenging. Meanwhile, they have sent some sample bags abroad to test the export market. Yes, they are on their way to a new place.

the second, third, or fourth for that particular woman or group. The fact that loans are taken out repeatedly is an indicator of sustainable and growing businesses. And in a qualitative survey that we conducted two years ago, the 300 women themselves saw increases in family income (91% of women), higher food intake (89%), and a feeling of increased awareness (96%). Also, 36% said they were accessing government services more effectively.

The wide range of enterprises also shows that we are tapping into the women's own potential. [See Text Box: "Helping Entrepreneurs Get Started"] They produce bio-pesticides, repair bicycles, run laundries or tailoring units or looms, produce artificial flowers or liquid soap, manufacture charcoal or kitchen utensils or toys, make bracelets or candles, and offer various forms of transport or barbershop services. And they buy and sell everything between heaven and earth: dresses, electric apparatuses, flowers, rice, tea, bags. They

have animals and run farms and grow and cultivate, but now on a larger and more profitable scale than before. They start beauty shops Indian style, offering oil massages and threading of eyebrows.

Citizen Centres, small service centres that sell services in the IT sector, have so far been set up in 760 villages, with more and more of them going into an entrepreneurial model. [See Text Box on next page: "IT Entrepreneurs Turning Ideas into Profit"] The goal is to start 4,000 such businesses, covering 20 million villagers with IT services, within the next four years. It is estimated that 1.5 million villagers will become computer literate in this process.

EXPORTING THE MODEL

These results have created interest elsewhere.

In South Africa, the government was worried about unemployment as high as 80% in some poor rural areas. As the recent attacks on fleeing Zimbabweans have shown, the lack of jobs, together with abject poverty, is proving an explosive cocktail, with violence erupting readily. In war-ridden Afghanistan, 6 million unemployed or underemployed people have few choices beyond growing poppies. Today some 3 million people are doing so and producing opium. Though 90% of Afghanistan's national budget comes from foreign aid, so far most of that money has been spent on infrastructure. Very little has gone to create local businesses.

Both countries have asked Hand in Hand for support in creating 1.3 million and 2.15 million jobs respectively. Finance is coming from the South African government and, in Afghanistan, from a coalition of supporting institutions with the World Bank taking the lead. Next in line is Brazil, where the Inter-American Development Bank is setting a pilot together with Hand in Hand and a local NGO in the poor region of Recife.

Hand in Hand's model of expansion is "training the trainers." The model is built with local trainers winning the trust of the women through their local knowledge and shared language. This cannot be achieved by foreigners, even if the colonial element has now vanished, as the trainers are Indians and not white Caucasians. Hand in Hand sends business consultants, translates manuals into local languages, and trains local NGOs and other institutions in the methodology. There must also be local microfinance institutions on site, with an infrastructure to provide local loans. Finally, financing of local training is required.

This year, Hand in Hand has started to expand into more Indian states. Next in line are Karnataka (with Bangalore), Andhra Pradesh (with Hyderabad), and the large landlocked state of Madhya Pradesh. Outside India, Ghana and possibly China are on the list, with the southern province of Yunnan hosting those left behind in a country with the world's largest differ-

IT Entrepreneurs Turning Ideas into Profit

For Selvi, finding customers is also a learning experience. Computer literate, she was approached by Hand in Hand, which tried to introduce her to the idea of a Citizen Centre, a small service centre that sells services in the IT sector.

The idea immediately appealed to her as she knew there were few similar enterprises around. In September 2007, she launched her venture. Initially it was frustratingly slow, and she had to draw on her husband's meagre income to pay back her loan. Then came the summer months and some parents in the neighborhood, who were slightly better off, were trying to handle hyperactive kids and still do their own work. She saw her chance.

Soon she had leaflets out in the neighbourhood advertising summer computer courses for kids and basic training in other software for anyone interested. Her business started taking off.

In this multifaceted India where extreme poverty mingles with high tech next door., her other products are structured for a more serious clientele. IT skills are becoming more and more profitable for the person who wishes to be employable. She now runs courses in desktop publishing, office applications, and animation and multimedia.

However, Selvi's monthly income is still not high enough. She herself says her location is not good enough, as it does not generate enough traffic. She also thinks an Internet connection would generate more revenue as many people in the neighborhood need access to the net and do not have it.

She plans to move her office and invest in a few more systems so she can set up a cyber cafe. She has just learned of the new SHG accounting software "Kuzhi Nidhi" and she sees a business potential in offering accounting services to other SHGs for a service charge. She also intends to continue with the current set-up services: software training and data entry. This go-getting entrepreneur has made a fairly accurate SWOT (Strengths, Weaknesses, Opportunities, Threats, a standard strategic-planning method) analysis of her small business.

But she would not have gotten there in the first place without the special microloans that Hand in Hand offers for enterprise creation.

ences in living standards.

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The lessons of this expansion are coming fast. You can export some of the model, but you must keep your eyes open for the local culture. In South Africa some women fear the financial risk. The trainers must therefore be more pedagogic in explaining the chain between investment and income. In Afghanistan they face a different problem: sharia law leads people to resist working with banks because they charge interest. All of these problems require sensitivity and innovation, but they can be solved with a mindset of solving problems and achieving goals.

TO THE NEXT LEVEL

The question now is whether Hand in Hand's model and similar methods can be used on a massive scale around the globe as one aspect of the effort to help people grow out of poverty. Let us calculate.

So far the cost of creating a job varies. In India, Hand in Hand runs its operations very tightly and carefully controls costs. The central administrative costs are a mere 3% and creating the average job costs only US\$50. At the higher end, in Afghanistan, the cost is US\$250 to \$300. The key reason for the difference is Afghanistan's structure of small and scattered villages, which requires more travel time and expenditures on security. Let us take a cost near the Afghan high end, and estimate US\$200 as the cost of creating a new job for a person in the bottom billion.

Worldwide, one billion people are living on less than US\$1 per day. In the developing world, one economically active person usually supports five others. That means productive jobs have to be created for roughly 200 million people. At a cost of US\$200 per job X 200 million jobs—thus US\$40 billion—we could theoretically support the bottom billion in growing their own way out of poverty, all in one go. But that would burden the aid budgets in a way that is not reasonable, so let us find a way that causes less friction. Further, entrepreneurs-to-be need some training, and it will take time to provide enough trainers.

In 2006, the world spent roughly US\$110 billion on foreign aid. Today some 2% of that goes to enterprise creation, micro-lending schemes etc. What if we increased that by 3% yearly to 5%? Then, US\$5 billion to \$6 billion would create 27.5 million new jobs yearly (US\$5.5 billion divided by \$200 per job), providing income for almost 150 million people (some 27 million jobs X 5 people living off the income). In eight years, the bottom billion would be starting to merge upwards.

These simple equations are not to prove exact metrics, but to argue that today aid can and should be reallocated to make more room for supporting individuals as they lift themselves, and to create jobs and enterprises. The idea is to help people self-help in everything.

THE ROLES OF GLOBAL BUSINESS AND AID PROGRAMS

What about global business? What role will it play in creating employment in the developing world? Do we need aid at all, or could we expect to see massive employment generated by a global economy and a general trickle-down of the wealth amassed in the middle classes? In general, globalization is pro-poor, as the open trade markets become an important tool for the poor to move out of poverty.

But global companies operate under intense competition and will never be able to generate sales volumes and margins to provide new jobs for hundreds innovations / summer 2008 15 of millions of people in the short time span provided by the Millennium Development Goals. Even if a company in India that today employs 100,000 people doubles in size, it will only yield 200,000 jobs. In India, over 700 million people are living on less than \$2 a day, and they all need a livelihood and longterm jobs. The hard truth is that job creation is in the hands of the poor themselves, and we must acknowledge that if we wish to help speed up this process. Trickling down will occur, but is impeded by the low productivity of the poorest, who lack skills and capital. Nor will global companies necessarily consider the needs of the poor for democracy, fresh water or personal empowerment.

The lifting of the many will depend on aid, if we want a rapid solution. But this aid needs to shift focus slightly. Aid budgets do massive good, but they have often left out an important piece of the puzzle: business creation. Aid budgets are tied up by the thinking that the world has to be perfect before we can eradicate poverty. In this mindset, the developing world needs functioning democ-

The hard truth is that job creation is in the hands of the poor themselves. racies, roads, electricity, health systems, education, and gender empowerment before it starts working towards a decent living standard for its citizens.

We agree that attention to education, health, democracy and the environment are all essential, and Hand in Hand works actively to strengthen them. But this work must never be an excuse for not working with job creation. To build a modern infra-

structure in a country like Malawi may take 100 years, but the poor cannot wait—jobs must be created now in parallel with building infrastructure.

We also claim that you can begin at the other end, with the roads still shabby, no electricity, rudimentary health care, and even children in bonded labor. As you start empowering the women economically, they will rise like the legendary Atlas and carry the world on their shoulders. As their household income rises, they will no longer sell their children to the owner of the loom or the weaving mill. They will care more about what they eat, and will have more money to buy food. They will start caring about the environment, and ask about the society around them. In Tamil Nadu, 27 of the casteless women in one district were even elected mayors in their panchayats (clusters of villages). That is a social revolution, throwing thousands of years of gender and caste stereotypes right out where they belong.

There is no conflict in working from both ends: on the one side we can improve factors at the levels of infrastructure or larger frameworks, and on the other support individuals in helping themselves. This work needs to go hand in hand, and our methods can work on a large scale given only a small reallocation of world aid budgets. All that is needed is some attention from the aid

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Green Businesses

Because of the recent burst of innovation in environmentally friendly businesses, Hand in Hand has developed special micro-loans to encourage these new kinds of enterprises. In September 2007, Jyothi set up a vermi-compost unit at a cost of 30,000 rupees (US\$712), and she has been running it successfully since. She borrowed part of the money via a special Hand in Hand vermin-compost microloan, and put up the rest herself.

In the village of Thirupukkuzhi, life for Jyothi was very tough. Her husband was a contract worker for the Electricity Board, with sporadic employment and never enough income. Jyothi tried to eke out some supplementary income by working in the fields and tailoring, but even so, every day was a challenge. She joined a SHG and understood that vermi-compost could be a profitable business since there were no running costs. She could get the cow-dung and household wastes that are used as raw materials locally, and for free. As a farmer's daughter, she saw the potential of such an enterprise.

Hand in Hand trained Jyothi to produce compost, by taking her to existing units and showing her how they functioned. Jyothi's unit has a thatched shed with pits filled with organic waste that is processed by earthworms: simple and inexpensive. The shed design and construction were laid out for her by Hand in Hand's field coordinators. To start the unit, she bought the 15 kg of earthworms she needed from Hand in Hand at 200 rupees (US\$4.73) per kg. The quality of the compost is so good it has been called "black gold."

She works for around an hour and a half in the mornings and about half an hour in the evenings. This leaves her ample time to look after her family and do other small jobs. Today, she enthusiastically describes the whole process of converting waste into organic manure to visitors with the confidence of a successful entrepreneur. She has also started cultivating azolla for cattle feed; this common water weed is high in proteins and increases the milk yield. She has noticed a yield increase of 10% to 15% in her own cows, which she bought using a Grameen loan of 3,000 rupees (US\$71) from Hand in Hand.

Since Hand in Hand also wants to make such rural entrepreneurs marketsavvy, they are instructed about prospective markets and the methods to approach and tap them. If no market is available locally, Hand in Hand steps in to provide market linkages. Jyothi actually uses some of her compost for her own agricultural needs. The rest she either packs for bulk orders or sells in attractive Hand in Hand cartons on retail shelves-and all the profits go to her.

Now she is busy making plans to scale up operations and set up another vermi-compost unit. Already she talks of marketing her organically cultivated vegetables. Green and profitable can obviously go hand in hand even among the poor, when put in the right framework. world to the very practical level where individuals make their life choices, and clever strategies in creating frameworks that propel these individuals forward in job creation.

GREEN GROWTH

Another important factor is creating growth for the many that is also environmentally sustainable. Many of the more gloomy predictions for CO_2 emissions arise as experts extrapolate from traditionally Western patterns of migration to cities into hundreds of millions of Indians and Chinese. What happens when they all do what we once did?

There is no conflict in working from both ends: on the one side we can improve factors on the levels of infrastructure or larger frameworks, and on the other support individuals in helping themselves. This work needs to go hand in hand

Today approximately half of the globe's ultra-poor live in cities. City life in developing countries creates greater environmental stress, as people need more transport, eat more fast food, and so on. This is especially true in India's megacities, like Mumbai. Once built for a few million people, it now hosts some 20 million inhabitants. The exact number is unknown, but the slums grow by the day, with appalling sanitary conditions. Meanwhile, the tradi-

tional social networks break down, costing the poor their only safety nets.

Hand in Hand believes that part of the solution must be to create local alternatives, jobs that can support the poor, without migration to the cities. Since the rural poor often live off agriculture, the solutions must challenge low productivity in the agrarian sector. You must be able to support your family on your cattle and off your land.

Hand in Hand is now setting up an innovative project, together with the Dutch development bank FMO, to train 8,000 female farmers to increase their productivity, and the amount of milk they produce and fruit they cultivate. Most importantly, it is giving them the skills to sell their goods without middlemen, straight into the many booming supermarkets in Chennai. This is where the growing Indian middle classes shop, and for wealth to trickle down, the farmers need training to compete and sell their produce. [See Text Box on previous page: "Green Businesses"]

LESSONS LEARNED

The world has seen intense phases of growth before. Europe industrialized. Then the United States became a superpower. More recently a billion people began to rise out of poverty in East Asia. Academic research has found a plethora of driving factors. Some are institutional, such as the emergence of property rights, the abolition of old guild and mercantile structures, and the growth of democracy or new economic frameworks, such as the limited company and other mechanisms that help people take economic risks. Others point to infrastructural changes: the emergence of well-kept roads, the electrification of homes and villages, the growth of educational institutions, or the availability of large-scale health care. Intrinsic to these revolutions were technological innovations such as the spinning jenny, vaccines, and the microchip. There were markets to export to, harbors to export from, and people willing to take risks in between.

But a strong pulsating undercurrent flows in the dynamism of the individual, willing to work hard, improve skills, and invest to create enterprises and jobs. Without this individual effort, all the changing macro-factors would have meant very little. It is in this swift interchange between the variable macro-climate and those individuals who jump on the wagon that economic evolution always takes place.

These individuals were helped by new frameworks that promoted entrepreneurship and encouraged, rather than hampered, individual drive and initiative. These frameworks provided the tools to become economically active, along with new markets for products and services, and lowered the risk of failing or becoming ill. They added leverage to efforts. Hard work could finally be translated into growth. Today this is what does *not* work in poor countries, where people toil endlessly to no avail.

We mean that something can be learned from history. There are underlying principles to be reused, where harnessing the underlying entrepreneurship among the "bottom billion" could bring about a 2025 when hundreds of millions are growing out of poverty.

In his book, *The Bottom Billion*, the former World Bank economist Paul Collier says that "Nowadays the talk is about poverty reduction and the other Millenium Development Goals, not about growth rates. Many of the people who care most about development feel more comfortable talking about goals, such as getting girls into school, than discussing growth.

But in this article we have aimed to do the opposite: to discuss development from the perspective of family incomes. Without economic empowerment at the household level we will not be able to achieve the Millenium Goals.

In the small snack shop on Old Municipality Road the women have now worked two shifts. The clock shows 11 pm. The small tin utensils are squeaky clean, and the ingredients for tomorrow's cooking are all in place. The

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Percy Barnevik and Maria Borelius

women are tired but content. This is their shop and their income. And their hopes are high.

What about bulk catering orders? Weddings and festival cooking? Saraswathi is now the main provider for her family, and she beams with pride. She is financing a college education for her daughter. Her colleague Jayakanthi's daughter drops by frequently after school, to have a snack and give a helping hand. New role models are growing right in front of her eyes.