From Iowa to India:

An Examination of Self-Help Groups In Puducherry



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GOOD NEWS ARRIVES

As I read the message in front of me, only my eyes had the power to move. The message was brief, but conveyed some of the best news I ever received:

Dear Katie,

I have seen the letter from Lisa Fleming indicating that you will work with us for several weeks as a World Food Prize Intern. We are all looking forward to welcoming you. We shall try to make your stay with us personally pleasant and professionally satisfying. Looking forward to welcoming you.

With best wishes, Yours sincerely, M. S. Swaminathan

India! I had been chosen for a Borlaug-Ruan internship and would be assigned to the M.S. Swaminathan Research Foundation (MSSRF) in Chennai, India for eight weeks. And the great Professor himself - - the first recipient of the World Food Prize - - was personally welcoming me aboard. I was overjoyed!

In the weeks that followed I eagerly anticipated the adventure of leaving home and traveling halfway around the world to experience a new culture so different from mine. The journey that subsequently spanned the summer of 2007, from Iowa to India and back, would have tremendous impact on me. I thoroughly embraced the culture of India. And in so doing I also embraced my own Iowa heritage as never before.

BACKGROUND: CITY GIRL, FARM ROOTS

I'm a "city girl," born and raised in Des Moines, Iowa. Until this summer I considered myself a lucky, relatively ordinary Hoover High School student, over scheduled and self-absorbed, my life revolving around family, friends, classes, school plays, choir, a part time job, and volunteering. Although I often take it for granted, Des Moines is a special place to grow up in. It has many amenities of city life: the Civic Center, the Playhouse, the Art Center, the Capitol, good libraries, and great schools. It has given me some unusual opportunities - - singing in a Metro Opera production and at Governor Culver's Inaugural, for instance, or participating in the upcoming Caucuses to pick a president. But big as it is, Des Moines still has a strong sense of community through its neighborhoods, schools, and churches. There are also larger community events and festivals that showcase Des Moines' diverse population.

A fairly sophisticated urbanite, that's how I saw myself. Yet often wherever I traveled and indicated I was from Iowa, the standard response irritated me: "Iowa? Isn't that where the corn and pigs are?"

I barely understood my own agricultural roots. My parents often reminded me that my great-grandparents on both sides of the family were Iowa farmers in Humboldt, Hamilton, Hardin, and Story counties. They emphasized that I should take pride in that heritage. But it just didn't mean much to me the way it does to my grandparents who grew up on farms, or my parents who grew up regularly visiting the farms of their uncles

and aunts. My only exposure to farming was the occasional visit to Living History Farms, a stay at the Garst Farm, and the annual Iowa State Fair. I was ignorant and indifferent about agriculture in general, and Iowa's agricultural significance to the world in particular.

That ignorance began to ebb when I attended the 2005 Youth Institute through the World food Prize Foundation. Possibly some vestige of being the farmer's great-granddaughter latched on to the chance to learn more about how agriculture battled world hunger. Because I had taken Spanish throughout high school, hoping to become bilingual, I researched a Spanish-speaking country. My topic addressed how malnutrition affects Guatemalan children.

Attending the Youth Institute was like entering a new world of global issues and problems, with dynamic solutions for hunger and social injustice through science, technology, and politics. I heard about sustainable agriculture and food security in fascinating presentations by international experts. The students also discussed these issues in small groups where we presented our papers. Dr. Gupta -- that year's Laureate and 'Father of the Blue (aquaculture) Revolution'-- was a member of my panel. I even got to meet Dr. Borlaug and learned more about his role in the Green Revolution.

The 2005 Borlaug-Ruan Interns gave individual presentations about their summer projects. Listening to them was riveting. Many of their projects involved field testing in climates with extreme heat. I was too young to apply for an internship that year but resolved to prepare by proving to myself that I could handle field work in intense heat and humidity, following Dr. Borlaug's advice to 'never be afraid to work hard.' I spent the summer of 2006 working for Pioneer as a pollinator in hybrid corn fields. In July we worked seven days a week with temperatures ranging from the 90's-100's. I came home each day sweaty, covered with pollen, and surprisingly energized.

I attended the Youth Institute again in 2006. This time my paper addressed climate change and its effects in sub-Saharan Africa. Again I found the same sensational synergy flowing through each speaker and participant. When I listened to the 2006 Borlaug/Ruan Interns speak I hoped it would be my turn to speak at the podium the following year.

ARRIVAL: FIRST IMPRESSIONS

My exposure to South Indian culture began before the plane touched ground. As I sat in my seat miles above land, I observed the multitude of Tamilian families surrounding me, hearing fragments of a new language - - Tamil, the language of the Tamil Nadu province - - being spoken so rapidly, syllables fused indistinguishably to my fatigued ears. Outside the window, I could see the sprawling city of four million plus people. My journal entry describes first impressions:

The plane came in at about 4:30 this morning, thirty-some hours after leaving Des Moines. When we circled the airport before landing, the wing gave way to an endless carpet of lights; it was amazing. Then I remembered that Chennai is the fourth most populous city in India. Figures.

As I walked up the terminal hall, it smelled like washed carrots; it was the closest thing I could compare. Then the frigid ice-cloud of the airplane quickly broke into the soupy medium I've been walking in ever since.

The baggage claim proved a long wait for 60 passengers with scads of luggage while a few hundred people –including large extended families—noisily waited just outside the terminal. Both of my suitcases were there and intact, which was a great relief. Soon Professor P.C. Kesavan, a very kind man, whisked me out of the crowd and away. After watching the driver wrestle my luggage into the hatch of the small cab (feeling very much that I should help, but was assured otherwise), we drove to his house so I could call home.

That first drive through Chennai was a mind-boggling tumult of colors, sounds, and people. Every possible space where wordy advertisements could be placed was used - - even on stair step risers. This was obviously a massive population center, but for the most part it was a city of densely packed one and two story buildings. Many roads were unpaved and the traffic was a phenomenon in itself:

People drive so closely here! Yet very few vehicles have rearview mirrors; it's a waste of road space. Somehow the instincts of the drivers here are so in sync with each other that they can pull pin-point u-turns at a moment's notice, run red lights after the other direction has gotten the green light, and drive on whichever side of the road is open, all without ever getting in an accident. Lanes here are more suggestions than anything. Their unusual use of horns is what keeps them from calamity. In America, a horn can mean anything from "Watch it, I'm driving here!" to... something worse. Here, it can range from a gentle alert of your proximity to a polite how-de-do. It takes some time to get used to it, but it keeps the streets casualty-free. The traffic illustrates why India is "chaos making sense."

The contrasts of India are especially evident in walking through the strong and varied smells of Chennai. One second you may smell the essence of jasmine and incense; the next second, an aromatic noose of human excrement and burning landfill tightens around your neck - - all because unpaved, untrod areas can become ad hoc land fills or sewers. More contrast: as you turn a corner, passing a pretty shop of sweet-limes and other snacks, you are pelted by a cloud of...pepper? No. Flies.

I also noticed the variety of animals that share the city's fast turf at a slower pace. On the way to the Kesavan's house:

... I must have seen 20 cows, 40 dogs, all the same unrecognizable breed, and a goat or two. Just sauntering down the side of the busy unpaved road, occasionally crossing at the most inconvenient moments, oblivious to and humored by the throng of people.

Even though it was barely dawn, Chennai was bustling with people starting their work day. In addition to pedestrians, there were people on bikes, mopeds, and autorickshaws. The women in their vividly colored saris seemed especially lovely to me. And the children I saw were beautiful. However, there were also other people. Very gaunt, skeletal, and mostly, it appeared, old men or men aged by malnutrition. Some of these men were walking; some were sitting by the road or lying down in front of buildings motionless. That was my first exposure to the raw specter of hunger. Thereafter, throughout the summer whenever I left the MSSRF compound I would see that specter again.

I, on the other hand, was blessed with my first Indian meal (with fresh mangoes!) that morning in the Kesavan's spacious home, graciously prepared by his wife, Amiya, and entertained by their energetic dachshund, Jonti.

MSSRF

After breakfast, Professor Kesavan took me to the MSSRF. The approach is impressive. The drive is lined with Flame-Of-The-Forest trees bearing bright orange flowers. A white chest high wall marks the perimeter. Inside the compound the landscaping is beautiful and vividly green - - a shocking difference from what's on the other side of the wall. The contrast stems from the fact that much of the Chennai area is urbanized wetland.

The compound is anchored by two large stately buildings, both solar-powered. The first building has a large courtyard with vegetation representing the five ecosystems of India: *Kurunji* (mountains), *Mullai* (forest), *Palai* (arid zone), *Marudham* (fertile plain) and the *Neidhal* (the coast). It also houses the labs and offices for Food Security, Biodiversity and Biotechnology, Informatics (a satellite system that helps villages communicate and monitor the weather), Coastal Systems Research, and Climate Change. The second building houses Ecotechnology offices and is connected to the dining hall and to the guest house where I lived.

The grounds of the Foundation are so peaceful, illustrating the harmony of sustainability and Nature. There's a remarkable Touch And Smell garden which was made for the blind. It's ingeniously constructed to free blind people from having to be led around. The designers use paving materials as a way to indicate direction, objects, etc. The main pathway is brick. At an intersection or corner, a shape made of small stones show direction: a "+" indicates that there are four ways one can walk; an "L" indicates a corner. Strips of carpet-like material are tacked to the ground across the path at points to indicate a plant. It hangs at shoulder-height, accompanied by Tamil Braille signage. The garden has great variety, everything from lotus plants to basil, (also know as "the Poor Man's Herb"; when offering gifts to gods, those less fortunate offer basil).

The organic banana plots and rain water harvesting field are the first indication that the tranquil setting belies a working enterprise. In fact, MSSRF is a veritable beehive of multidisciplinary activity. According to the Foundation's website, the MSSRF:

"was registered in 1988 as a non-profit Trust. The basic mandate of MSSRF is to impart a pro-nature, pro-poor and pro-women orientation to a job-led economic growth strategy in rural areas through harnessing science and technology for environmentally sustainable and socially equitable development."



MSSRF is organized around five main areas: (1) Coastal Systems Research, (2) Biodiversity and Biotechnology, (3) Ecotechnology and Sustainable Agriculture, (4) Informatics (satellite communication to "Reach the Unreached"), and (5) Education, Communication, Training and Capacity-Building.

The hard scientific research at MSSRF is cutting edge. A tremendous amount of biotechnology and molecular genetic research has improved agricultural productivity, food security, and human nutrition - - and not just in India. For example, MSSRF has isolated and transferred the ferritin gene from mangroves to rice cultivars which, in turn, produce higher amounts of iron. This achievement can offset iron deficiency which is the biggest nutrient deficiency in the world, affecting an estimated 30% of the global population. Other research involves: developing in vitro protocols for rare and endangered plant species; assessing ecosystem health using microbes and lichens; bioprospecting for novel compounds of medicinal and therapeutic value; gene transfer among crop varieties to improve micronutrient deficiency and tolerance/resistance to abiotic stress.

The Foundation emphasizes bottom-up participation from lay people. This is a philosophical hallmark of the founder. Professor MS Swaminathan, a plant geneticist by training, has, like Dr. Borlaug, dedicated his life to fighting the injustice of hunger. His most famous accomplishment was bringing the Green Revolution to India; for this reason Indians revere him on the same level as Gandhi. As Dr. Borlaug wrote:

"To you Dr. Swaminathan, a great deal of the credit must go for first recognizing the potential value of the Mexican dwarfs [a high-yielding, pest resistant wheat variety]. Had this not occurred, it is quite possible that there would not have been a green revolution in India." (Mathur)

In 1987, Professor Swaminathan was recognized for his outstanding achievements by becoming the first laureate of the World Food Prize, the Nobel equivalent in the field of agriculture. It is "the foremost international award recognizing -- without regard to race, religion, nationality, or political beliefs -- the achievements of individuals who have advanced human development by improving the quality, quantity or availability of food in the world." (WFP)



Professor Swaminathan used the World Food Prize money (\$250,000) to bring a new kind of progress to India. A Nobel laureate (1930) and inspiration to Professor Swaminathan, Indian physicist C.V. Raman, had used his resources to create an institute for the sciences in India decades ago. In 1988, Professor Swaminathan followed suit creating the MSSRF, with its multidisciplinary focus on sustainability and pioneering role in the empowerment of women.

Understandably, I was thrilled to meet the great man and was charmed by his grandfatherly warmth:

I went to meet him later today in his waiting room/office. I picked up what they call Bahran's Journal, something most intellectual I assume. Then Dr. Swaminathan bursts in scurrying with a load of books, apologizing for keeping me waiting. After situating his things, he finally looks over, and says "OH, you are our intern for this summer!" and almost charges over, gives me this bear hug, and pecks me on the cheek about five times before he says, "now, I will be your father for the next eight weeks, yes? You behave yourself, now, you understand?"

MICRO-CREDIT AND THE SELF-HELP GROUP CONCEPT

My supervisor at MSSRF/Chennai was Dr. Sudha Nair. An amazing woman, Dr. Nair is a microbiologist who has become a leading ecotechnologist. She asked me what I wanted to get out of my two-month stay. I told her I wanted to interact with the rural people, and gender issues fascinated me. She gave me an overview of the Self-Help Group (SHG) concept. I was fascinated that a program which began so modestly at a local level could be so successful in lifting thousands out of poverty, all while raising the

status of women. Dr. Nair then assigned my project: I would explore the structure, function, and resulting benefits of the Self-Help Group movement.

The SHG concept is a grassroots innovation whereby micro-credit loans are administered through local co-ops to lift women and their families from poverty. Microcredit is distinct from conventional credit in that the loans are disbursed in very small amounts and at reduced interest rates. For example, the typical SHG loan in India may only be 40,000 to 50,000 rupees (1,000 to 1,250 American dollars). This loan may be for a group project, or may, in turn, be divided in smaller amounts to individual members.

The micro-credit movement is considered a revolutionary economic concept which successfully addresses entrenched third world poverty. Dr. Muhammad Yunus pioneered the concept in Bangladesh in the 1970's through the Grameen Bank. For his achievements he received the World Food Prize in 1994 and the Nobel Peace Prize in 2006.

The Grameen Bank's micro-credit project targeted both genders equally; men originally comprising 55 percent of the participants. However, by the mid-1980's, male participation plummeted and women eagerly filled the gap, constituting more than 95 percent of participants by 1997. In the words of Dr. Yunus: "Women experience hunger and poverty in much more intense ways than they are experienced by men. Women have to stay 'home' and manage the family with virtually nothing to manage with. Given the opportunity to fight against poverty and hunger women turn out to be natural and better fighters than men" (Rahman).

In the province of Tamil Nadu micro-financing began in 1989 with a pilot project in a small district of Dharmapuri, financed by the International Fund for Agricultural Development (IFAD). The program proved to be very successful. Subsequently, in 1996, under the leadership of Dr. Selvi J. Jayalalithaa the (female) Chief Minister of Tamil Nadu, micro-credit became a government-backed program in the province when IFAD withdrew. This new government-backed project was named "Mahalir Thittam," or "MaThi," meaning "Women's Programme."

The program met a number of obstacles. The most evident, however, was the overall suspicion of village people. Many thought the program officials who visited villages to publicize micro-credit opportunities were part of a scam. Some even suspected that the program officials had come for body parts. However, the transparent procedures, reasons for involvement, and resulting benefits overcame community distrust.

The SHGs I studied are all affiliated with the MSSRF through the Biocentre in Puducherry, which is a union territory of India, not a province like Tamil Nadu. The Biocentre serves as the hub of support to institute and maintain SHGs at the behest of the Puducherry government. Money is administered by the State Bank of India and by Indian Bank to local SHGs. Though it is the government that formally requests the establishment of SHGs, it is MSSRF that truly begets economic Self-Help. The people of MSSRF/Puducherry personally see to the success of the SHGs by conducting on-going training at the Biocentre for women representing their new or established SHG. Training introduces information about successful micro-enterprises, basic financial concepts, record-keeping requirements using passbooks, conflict resolution, etc. The women enthusiastically share questions and stories from their villages. Each of these women then reports back to her local SHG, usually a group of 10 to 15 women.

The Biocentre also hosts major business transactions between the banks and the SHGs. Bank officials and SHG members draft and sign loan agreements and disburse money. Representatives of SHGs in turn travel to bank branches on a regular basis to deliver installments of their loan repayment.

Just yards from the Biocentre is another important provider of technical support. The Village Knowledge Center (VKC) was founded as part of Professor Swaminathan's "Mission 2007: Every Village a Knowledge Center" project. A modern 2-story building, the VKC houses a computer lab with 15 computers connected to the Internet. As of yet, more villagers (especially students) than SHG members use this equipment; most SHG members lack sufficient education necessary for basic computer operation. The center also provides cameras and television screens with satellite uplink connections to facilitate communication across communities, eliminating the need for travel. Local weather forecasts and a variety of public health literature are provided. (Two examples of the latter that stood out to me were brochures, one promoting "No-Scalpel Vasectomies" and another discouraging the practice of selective abortion of female fetuses.)

SHG Process: A group is established when a number of women, usually from 10 to 15, come together and approach an establishment that can help educate them and lead them successfully. In this case, that institute is the Puducherry branch of the MSSRF. Among the goals of the SHG concept is to strive for equality, thus every member carries the same weight and has the same amount of influence. The term "leader" is avoided, as the word insinuates a higher status than other members. However, two positions are maintained in the group: a Secretary, who records and directs discussions, and a Treasurer, who keeps records of financial transactions. Both posts are often held by the youngest members as women's literacy is a fairly recent social change which typically benefits younger women. The training of the Treasurer is crucial, as it is her responsibility to keep records of all group transactions in a "passbook." After agreeing on an initial amount of money to pay, they open a group account in a large bank. Once this account is opened, monthly payments are made to help their lending capital grow.

In addition, the SHGs initiate the procedure of interlending. In the process of interlending, small amounts of money are lent to SHG members for purposes such as household repairs, their children's education, health-related expenses, enterprise activity-related expenses, and Kandhu Vatti, (discussed below). The money is taken out of the group's account and lent to the SHG member to cover a specified cost. All expenses are repaid with interest, the rates and repayment time allotted varying from SHG to SHG. The rates, which are usually 24 or 36 percent, seemed exceedingly high to me initially, but 1) the interest feeds into the group's account which can be used for more loans, and 2) the rates are diminutive in comparison to Kandhu Vatti - - an oppressive fixture of village life I noted in my journal:

Kandhu Vatti is a Tamil term for local moneylenders who prey on people struggling to make ends meet. They have money, and they know that many people are in desperate need of it. A local moneylender strikes a bargain with a civilian: if that person needing money owns land, the moneylender will loan money, but will require that the money be repaid in an impossibly short amount of time, often

before a farmer could repay the loan. This happens many times, and the moneylender will take the farmer's land as payment (which contributes to the problem of farmer suicides). Concerning the landless, moneylenders will also loan money, but charge usuriously high interest rates. One woman I interviewed was charged over 400 percent in interest, forcing her to repay five times what she borrowed. The reason so many fall victim to Kandhu Vatti is financial desperation; the food security issue in India is not due to lack of food, but rather the "lack of income to buy the food," as Professor Kesavan says.

<u>Success</u> After six months of interlending and helping each other to make their small pool of money grow, an official of the associated bank travels to the nearest foundation and assesses the validity of the SHG, looking specifically at two things:

- 1) How often the group has used the account to increase their capital, and
- 2) How efficiently members are in repaying loans within the group.

After reviewing these areas, the bank official gives a maximum loan amount a group can take out with an allotted repayment time period. With this money the group initiates a micro-enterprise, either as a group activity, or following an individual trade known through tradition. If the group is successful in repaying the loan, the bank gives the SHG a 1:1 to 1:4 linkage. This means the group can receive a loan up to four times the initial amount.

Women SHGs are incredibly successful, earning a 95 percent overall repayment rate in India. There are a number of reasons for this. One is financial responsibility. Because rural women's access and control of money is a fairly new development, the rest of the community puts them in a spotlight which undoubtedly creates accountability pressure. Not only does pressure come from the outside, but members push each other through a social instrument called group liability, or, more simply put, peer pressure.

Economic power is social power. This newly found influence of women is contingent on the success of their financial obligation. As money is difficult to come by, the new authority of these pioneering women is palpable. Now that women are proving that they can handle money, they are gaining respect in the community. Male members of the Panchayats (the local level of government) come to SHG members for financial advice. While the advancement of women's status overall is not formal, the ascent of these women in community standing is clear nevertheless.

My Project: After researching the structure and goal of SHGs and the rationale for the gender bias (targeting women instead of men), I formulated what I expected to be a survey, covering background, economic, and social areas (Appendix A). However, after my pilot tests with two women in Puducherry, I realized this was going to be a more elaborate interview, as each woman had a poignant story to tell.

With the integral help of my supervisor and senior scientist Dr. Sudarkodi and others at the Puducherry Biocentre, I conducted interviews with twenty-three women selected by the staff, each interview lasting anywhere from ninety minutes to three hours. My questions were brief but numerous; most of the interview consisted of the interviewee elaborating on an answer with a story. In spite of the language barrier, as I sat taking notes from my mentor Dr. Sudarkodi, I understood the main points of each woman's discourse.

The first woman I interviewed described the initial obstacles to SHG participation best. Selvi is a 12-year SHG member from her village of Mangalam, and the secretary of her successful SHG. But her personal success and the success of her SHG was achieved only after overcoming barriers.

Before Selvi knew of the Self-Help group concept, she had nothing. Selvi was confined to a patriarchal home with no income whatsoever, living with her husband, in-laws, and children, before her children grew up. Her husband is deaf and unemployed. She was often so subject to male dominance, she could not leave her hut devoid of permission without her husband beating her. The only way they scraped money together was through a governmental loan of 3,000 rupees (about 75 dollars) since he was "handicapped." All they had to do was go to their village administrative officer to have him serve as a sort of witness that he was deaf. The village administrative officer took 1,500 rupees as commission. She still had to repay the 3,000 to the government. Why? The village administrative officer also controls marriages and traveling licenses and such. It was important to keep good relations with him if she wanted to help her children get married or find a future in the city.

Then 12 years ago, she found out what a Self-Help Group (SHG) was through someone at the MSSRF. Her village didn't have one, so she brought the concept to her village. At first, each member contributed 10 rupees each month, or about 25 cents. Then after six months of putting savings into the bank, they were allowed to use their money for interlending between members for things like school fees for children, emergencies, and most of all, Kandhu Vatti.

The SHG charges members usually 24% or 36% interest for loans (far less than Kandhu Vatti, which can reach 200 percent or often higher), depending on the purpose. For each 100 rupees (~\$2.50), they have one month to repay. The interest money goes directly into the group's account in order to increase the group's lending capital for more loans.

Selvi's group started micro-enterprising. Usually each group invests in one activity. Selvi does four:

- -vermicomposting,
- -floriculture on her precious and coveted .5-acre of land
- -mushroom cultivation, and
- -dairy farming.

After the first few years, members went from saving 10 rupees a month to 50 (a little over 1.25). For the last few years, they have been putting aside 100 rupees.

I was lucky to have found an example of a woman who had few problems with her husband or in-laws. Many times the in-laws choose the number of children they will have, the daily schedule of the wife, and sometimes make the wife pierce her nose if they think it will make her prettier. That's why SHG members have run into

a lot of difficulty with their in-laws and husbands. Women have to ask their husbands to go anywhere, and have had to stand their ground with the emergence of SHGs and the associated mandatory meetings. Sometimes they are beaten for returning home late. The family doesn't understand the structure of the SHGs, so they're suspicious. Until money comes in.

In Selvi's case, her husband was supportive as soon as he understood the SHG concept. When she went to meetings, he watched the children. Now her daughter works in sports in Chennai, and her son is getting his degree in engineering.

I am so awed by this. And haunted by what's left to be done.

ANALYSIS

(See Appendix B for graphs documenting statistical findings)

The tangible proof that Self-Help Groups are successfully lifting women out of poverty is their income. Employment rates increased drastically, and the current microenterprises they hold now offer more stability. The amount of the women's income has increased drastically, some by as much as twenty-fold. These financial gains lead to other tangible gains for members and their families: in nutrition and education (for the children) most notably.

Members of SHGs have increased their financial knowledge in ways that impress other villagers. Members now are not afraid to talk with bank officials because they are armed with knowledge. The SHG process has also affected the women's personal mobility because it requires representatives to travel to their associated bank to deposit monthly savings and make other financial transactions. Prior to SHG participation, women did not travel far at all. Many were confined to their villages, either by order of their husbands, fear of the unknown, or both. The frequent trips to the bank helped break the women's fear, and expose them to life outside the village.

SHG participation and success increases the women's independence and autonomy in decision-making and money-handling. Because others realize that SHG members are capable of making decisions within the group, this power carries over to domestic life. Women are now making more decisions concerning clothing, food, household upkeep, health-related expenses, and education of children. As a result of the attention to the women's opinions, child welfare is substantially enhanced. More children are enrolled in private school, as SHG participation makes it more affordable, which in turn opens doors to their children in later years. Similarly, women's access to handling money has improved. Before becoming part of their SHG, many women were not allowed to handle money because their husbands didn't think they would know what to do with it. Now, due to SHG involvement, this misconception is disproved.

In conjunction with their higher stature in the community, members realize that their opinions are indeed well-founded and have gained more self-confidence as a result. Individual stories vary, but overall, the realization that they are qualified to say "this is wrong, this is right" without disapproval is becoming more apparent. These decisions

span family issues as well as community issues. One woman I met even righted a wrong in another member's family. Dipapriya, a secretary of her group, heard that Muthu's (another member of her SHG) husband would not allow her to attend meetings. Dipapriya then did something revolutionary. She, along with the other SHG members, gathered at Muthu's home and talked to Muthu's husband who relented. Muthu is now free to attend meetings. This underscores how the teamwork concept makes SHGs incredibly successful.

Economic empowerment is gradually and directly translating into social empowerment at home and in the community. Villagers, both men and women, are seeing the potential of SHG members, and therefore give them respect. This is shown by the treatment of SHG members by male members of village Panchayats (the village-level form of government). The case of Puducherry is unique due to the absence of a Panchayat system for the last three decades. In 2006, the Panchayat system was reconstructed. Though the men currently hold the official position of "Decision-Maker," they are coming to SHG members for advice on community decisions. In the old Panchayat system, women were discouraged from attending meetings. Now, with courage gained from SHGs, some women have even stepped forward and run for office positions within the last year.

PERSONAL EXPERIENCES

Seva Samajam Children's Home

I went to India, hoping to interact with people from all walks of life, and possibly find an extracurricular activity to get involved in after work at MSSRF ended (five in the evening). About halfway through my internship, I tried to seek out such an endeavor. While having a discussion with Mrs. Mina Swaminathan, she informed me of an orphanage, Seva Samajam, which was within walking distance! I was ecstatic.

Seva Samajam is a home to nearly 200 orphaned children 5 to 18 years of age. It began in 1950, and has substantially grown since then. Sadly, in many cases, orphans are not able to be adopted internationally due to a lack of documentation (e.g. birth certificates, death certificates of parents, etc.).

I went to Seva Samajam accompanied by my colleague and mentor, Dr. Vijay, who ended up being much more than a guide. He translated for me that first day because the children and employees of the orphanage spoke as much English as I spoke Tamil, i.e. very little.

At first, I had lost a lot of hope in any activity here: how could I help people who couldn't understand me? However, a few days later, I went back to Seva Samajam and asked if there were any teaching opportunities for younger children. I hoped that teaching children with a smaller Tamil vocabulary would mean a smaller communication rift.

Partially funded by the state government, Seva Samajam contains a Lady Nye Special School within its walls for elementary and secondary education. The headmistress told me that I could teach a class of children in the fourth and fifth standards (fourth and fifth grades) English and Math (pronounced "Mats"). I was excited, but

thought, how can I teach these children English when we speak so little of each other's language? Then I thought back to my high school life and realized I hadn't committed my most recent years to drama for nothing. This sparked an idea that promptly restored confidence.

I found that my students were far more receptive to the "charades" approach. Not only was it fun for myself and the students, the students showed drastic improvement in connecting spoken words to characters on paper, especially if pictures were shown. By teaching them simple songs such as "Eensie Weensie Spider" and "Row Your Boat," students were able to associate gestures with sounds and written words.

Teaching the other subject, mathematics, was amazing. Luckily, English and Tamil share the same characters in the numbering field. Most of the children in the classroom were ten years of age or younger, yet they were extraordinarily well-versed in their tables. I could not believe the motivation of these young students; it was an enthusiasm I seldom saw in children at home, even when I had worked as a teacher's aide.

After many days of reiterating multiplication tables, I wondered if I could take the students to a higher level; I tried introducing exponents. We began a lesson at 5:30pm. They had memorized their squares up to 16, and cubes up to 10 by 6:30 that same day. I was stunned. An entire class was fighting for attention to answer math problems that a student much older would struggle with. They grasped the concept in less than an hour.

This teaching experience was eye-opening, heart-wrenching, and exhilarating all at the same time. I had never known students with such a drive to learn. I sadly understood why; these children, like many others, would have to fight for education and employment later in life. Whenever a student would answer a problem and I would tell the girl or boy, "adhu chari," ("that is correct"), or "ni buthisalli," ("you are smart"), the luminous smile on that child's face was the greatest reward I could want.

When I would leave for the day, children would climb the trees inside the orphanage's walls to see me off. The memories these children gave me will be cherished forever.

The Boy

During the course of my internship, I was blindsided by a sadder part of India in a way I should have anticipated, but did not. This was the specter of hunger and poverty I saw each time I left the MSSRF compound. In this instance, after touring through Chennai with a small group of new friends, we were looking for a bus that would take us back to the MSSRF.

Until then, I hadn't been excessively close (physically) to the urban population. I had become reluctantly good at looking past the stooped old women who tugged on my clothes and motioned "food" with their hands. Don't be misled; I don't overlook these people by my own free will. I've been repeatedly warned and strongly advised not to encourage them to continue on that road instead of getting a job.

It was about six in the evening, and we were standing by a small shop by the road when I felt the familiar tug, but this time not as high. I looked over and came

face-to-face with this tiny whisper of a boy. He couldn't have been older than six, but it seemed as if a three-year-old had been stretched upward to fit the height of a boy twice that age. His skull served a poor home to his eyes that bore into mine. He wore pants, but no shoes. No shoes and walking in a broken glass-ridden street. I cringed. One of his celery-stalk arms held little bags of cotton swabs, while the other motioned "food" with his hand, while he said, "ammaa," which can mean either "yes," or "mother." Either way his eyes wouldn't let go of mine, so after failing oblivion, I asked him how much he was asking. "Ten rupees," he said. I could have found them at a general store for 50 paises, or half of one rupee. I spared the ten rupees; an outrageous 25 cents.

We started moving again. I saw him standing in the street just off the walkway, staring blankly at the buzzing crowd. Then he was gone.

That boy's eyes stay with me to this day. The idea of children on streets at night when they should be resting for school the next day is one that still makes me wince. This was my first encounter with thwarted potential. It aggravated my impatience with social injustice in a way that continues to, and will always, stir in me.

The Girl

However, other instances of interaction with children give me so many reasons to hope. In Puducherry, I worked with women, and subsequently interacted with many of the younger generation. One unforgettable occasion was during an interview in the village of Pillayarkuppam, just outside of Puducherry. It moved me beyond anything words can express.

I was in a woman's (Valli, a goat-rearer) hut -- not exactly; we were in the entryway just outside the main room in the front, but it was covered by the coconut thatch roof. Her daughter and neighbor sat nearby. I could feel the sun baking my right side, and was sweating quite profusely. Each interview could take anywhere from one to three hours, depending on whether the interviewee gives direct answers. This particular woman was in serious financial turmoil, so I clung to everything Dr. Sudarkodi would tell me. It was about three or four by that time, when schools let out. I was following the interview as best I could, so I didn't realize the time. Then I gradually felt the lack of sun on my leg, arm, torso, and shoulder. I glanced over. There were at least ten children between the ages of 2 and 10 lined up outside the hut, trying to get a look at The Foreigner. We exchanged smiles; mine polite while trying to stay Professional, theirs filled with a timid phosphorescence. I love kids, but I (miraculously) kept my focus. As I jotted down my replies, I felt a girl's chin resting on my shoulder (a boy wouldn't dare in this social structure). I knew if I turned around she'd dart away, so I just let her keep her head there. I was about to document some more of my findings, and we had skipped around the pages, so I had lost place. Then the girl reached over and pointed to where my spot on the paper was. She was absolutely correct.

This girl could read English.

I thought of the enormous financial sacrifice her parents were making, sending her to a private school, where learning English was the ticket to a good job and an escape out of poverty. I thought of the confidence they had in her. A girl. That is progress in its purest form.

I thought of the future she has because of her education. I have made many friends with the same stories at the MSSRF in Chennai, but all of them have been men. But this time—this time, things are changing.

Every time I think of that moment I feel overwhelming happiness. I didn't expect it, yet I had hoped for something like this: a symbol of empowerment of the future generation, and there she was, literally resting on my shoulder. After listening to so many stories of crushing poverty, I thought of how this girl has the opportunity to free herself from these problems when she grows up. The issue in developing countries is neither the lack of will nor lack of aptitude; it is the absence of aid to help them achieve their enormous potential.

REFLECTIONS

My Borlaug-Ruan internship has been a life-changing experience. It has given me a new perspective on a myriad of things. I now look at current events holistically, knowing that each nation is interconnected to every other nation. Such obvious events, like the Glasgow terrorist attack, prove this.

I learned on a less apparent level as well, by living among people in the Third World. I learned from rural Indian citizens that my home is an El Dorado to those deprived of sufficient food and education. Until this summer, I had no idea what the world's perspective was on my country.

Many times during my field study I sat with groups of women, though I spoke hardly any of their language. One of these times was especially poignant. A woman had brought her small child along, so I gestured with smiles in an attempt to create a light, though wordless, atmosphere. Many times, the mother would smile, tap her child, and then make gestures over her head with wind-like sounds. I hadn't the slightest clue what she meant. When I asked my supervisor Dr. Sudarkodi what the mother was saying, I was shocked at the translation. She was asking me to take her child to America; the gesture and noise symbolized "plane."

This moment, among others, was a jolt of reality, speaking volumes about the conditions of the lives of these people. This woman didn't even know my name; she knew only that I was from America. Yet she was asking me to take her child. I couldn't believe anyone's situation was that dire; nevertheless I found myself surrounded by people who knew America to be a majestic land of plenty. Until then I never truly appreciated the genetic lottery I had won by being born here.

I am unspeakably lucky to have had the chance to be immersed in a culture so different from my own. I was exposed to the beauty of Tamilian culture, food, and people. I saw the gut-wrenching devastation of extreme poverty, and felt tremendously responsible for the pain of oppression when I was surrounded by starving people. I deeply respect the honesty India has shown me about global poverty and the opportunity

to work among visionaries who believe there are solutions, dedicating their lives to that noble objective. Because of this experience, I still feel responsible, but now feel hopeful, too, that there are infinite ways to alleviate this violation of basic human rights.

By seeing the slippery spiral of hunger in India, I have come to a greater understanding of the meaning and importance of food security. Without means to sustain a family, few can survive the pressure of high population density and unemployment. It's a cruel paradox that seventy percent of India's population depends on agricultural employment, yet many cannot afford to buy the products. Through the eyes of the agricultural laborers I interviewed, I saw new truths. The personal experiences I had with those women and everyone I met this summer has given me a new pair of eyes with which to see the impact of market competition, food prices, and the phenomenal work of micro-credit and Self-Help Groups.

I became enamored of a foreign culture and heritage. Yet, just as important, I learned to embrace my own. For the first time, I truly realized the importance of agriculture globally. I witnessed how lives typical of the Third World revolved around agriculture. I had worked in Iowa cornfields, considering it little more than a summer pastime, while these people slaved under the hellish sun to keep their families afloat one more day. I thought I understood agricultural work, but had only scratched the surface. By meeting people with such devotion to their land, I appreciated the devotion of my farming ancestors and of farmers around the world. I have a deep and newly formed pride in being an Iowan descended from Iowa farmers.

That pride was mirrored back to me through the reaction of Indian scientists to my home state. When asked where in America I was from, I was offered the normal options of California or New York. But when I said I was from Iowa, I was stunned by the response: "ISU! ISU!" I realized that the agricultural research at the university less than one hour from my house is a beacon of progress that illuminates the world. Prior to this internship, I had few ideas about my career aspirations. However, now one of the colleges I'm applying to is ISU where there are many opportunities to pursue a field related to food security.

Hundreds of thousands of Indian people depend on agriculture to keep their heads above the creeping line of poverty. I regret that I ever dismissed its importance. Without this life-changing experience, I could not possibly have gained the reverence for agriculture I now have.

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- Graphs and pie charts were constructed with the help of the National Center for Education Statistics: http://nces.ed.gov/nceskids/createagraph/default.aspx

Appendix A

Questionnaire

Interview Questions

- I. Background Information
 - 1.) Name
 - 2.) Age
 - 3.) Marital Status
 - a. Arranged?
 - b. How long have you been married?
 - c. Age at time of marriage
 - 4.) Family Type (nuclear vs. extended)
 - 5.) Society Type (Traditional caste/ backwards caste/Scheduled caste/Scheduled tribe/Khatri caste/???)
 - 6.) Children
 - a. Age and Gender of each
 - b. Education level of each
 - 7.) Land? How much?
 - a. How land is utilized
 - b. How much of land is utilized
 - 8.) If no land, what is livelihood?
 - 9.) Education level
 - 10.) Membership in SHG (if no, skip to section II)
 - a. Age of SHG
 - b. Type of Industry
 - c. Size of Group
 - d. Women/Men/Mixed
 - e. How are group decisions made? (voting, led by animator, etc.)
 - f. How was your SHG formed? (Interest vs. location)
 - g. How was the industry chosen?
 - h. Number of Meetings per month
 - i. Do you find this frequency satisfactory?
 - i. Meeting Time of Day
 - j. Length of Meeting
 - k. Meeting Place
 - Is it permanent (Have you established it as the official meeting place?)
 - ii. How convenient for you is your meeting place?
 - Do your meeting go beyond the specified time?
 - i. How often?
 - ii. How does your spouse/family react?
 - m. What is your policy on missing meetings?
 - n. Are meetings conducted efficiently (scale of 1, not efficient, to 10, highly efficient)
 - o. Bank Loan
 - i. Amount of loan
 - ii. Interest rate of loan

- p. Interlending
 - i. Interest rates
 - 1. Child-related expenses
 - 2. Household expenses
 - 3. Health-related expenses
 - 4. Economic Activities
 - 5. Emergencies
 - ii. How long are members allowed until reimbursement?
 - 1. Child-related expenses
 - 2. Household expenses
 - 3. Health-related expenses
 - 4. Economic Activities
 - 5. Emergencies
 - iii. What have you personally borrowed money for?(specific activities, e.g. buying an animal, paying off kandhu vatti loans, children's medicine, etc.)
 - iv. How many times have you borrowed money from the group over the last year?
- q. How long did it take to save money (depending on age of group; what amount over x years or months)
- r. How much money did each member contribute?
- s. How often did each member contribute?
- t. Expenses (how much money went towards what)

II. Financial

A. Pre-SHG

- 1.) Beginning financial security
 - i. (Married) How much money did you and your husband have to start your married life? (as a gift by family/friends, dowry, or savings)
 - ii. (Unmarried) When you began life on your own, how much money did you have
 - 1. Was any money given to you to live or make a livelihood?
- 2.) Industry/Income
 - a. Did you have an industry you worked in?
 - b. How many (List)
 - c. Seasonal/Year-round
 - d. Length and time of year of each seasonal industry
 - e. Income generated from each industry
 - f. Primary/Secondary Income? (Are you or your husband the breadwinner?)
 - g. Did your industry (ies) depend on the monsoon each year? (yes/no for each industry)

- 3.) Did your husband have a job?
 - a. Income
 - b. Industry
 - 1. If more than one, list others
 - ii. Seasonal/Year-round
 - Specify time of year and income generated by each, if applicable
- 4.) Income (Yearly)
 - a. Combined (your income + your husbands income)
- 6.) Bank Loan(s)
 - a. Amount
 - b. Purpose
 - c. Able to repay?
 - d. Name of bank
 - e. Name of holder
- 7.) Individual Enterprise/Industry
- 8.) Bank Account
 - a. Holder/Manager (You or spouse?)

B. Post-SHG

- 1.) Do you earn an income?
 - a. Primary vs. Secondary
- 2.) Industry
 - a. Do you have an industry you work in?
 - b. How many (list)
 - c. Seasonal/Year-round
 - d. Length and time of year for each
 - e. Income generated from each industry
 - f. Do(es) your industry(ies) depend on the monsoon's each year? (yes/no for each)
- 3.) Does your husband have a job?
 - a. Income (yearly)
 - b. Industry
 - i. If more than one, list others
 - c. Seasonal/Year-round
 - Specify time of year and income generated by each, if applicable
- 4.) Income (yearly)
 - a. Combined (you + your spouse's income)
- 5.) Bank Loan
 - a. Amount
 - b. Purpose
 - c. Able to repay?
 - d. Name of bank
 - e. Name of holder

- 6.) Individual Enterprise/Industry
- 7.) Bank Account
 - a. Holder/Manager (You or spouse?)

III. Social

A. Pre-SHG

- 1.) Dissection of a typical day (time spent on each, expressed in hours)
 - a. Income
 - Domestic life (housekeeping, cooking, tending to children/husband/other family)
 - c. Oneself
 - d. Rest
 - e. Leisure
- 2.) Voice in everyday decisions
 - a. If yes, list
- 3.) Your Duties
 - a. Food/cooking
 - b. Children
 - c. Income
 - d. In-laws and spouse care
 - e. Keeping house
- 4.) Spouse's Duties
 - a. Food/cooking
 - b. Children
 - c. Income
 - d. Parent care
 - e. Keeping House
- 5.) Children
 - a. Did you choose the number of children in your family?
 - b. If not, who did choose?
- 6.) Access to birth control (if still capable/likely to have (more) children)
- 7.) Education of Children
 - a. Do your children go to school?
 - b. Who made that decision (you/spouse/in-laws)

B. Post-SHG

- 1.) Dissection of a typical day (time spent on each, expressed in hours)
 - a. Income
 - b. Domestic life (housekeeping, cooking, tending to children/husband/other family)
 - c. Oneself
 - d. Rest
 - e. Leisure
- 2.) Voice in everyday decisions
 - a. If yes, list

- 3.) Your Duties
 - a. Food/cooking
 - b. Children
 - c. Income
 - d. In-laws/Spouse care
 - e. Keeping House
- 4.) Spouse's Duties
 - a. Food/cooking
 - b. Children
 - c. Generating an Income
 - d. Parental care
 - e. Keeping House
- 5.) Children (Optional)
 - a. Do you choose how many children you raise?
 - b. If not, who does choose?
- 6.) Access to birth control
- 7.) Education of Children
 - a. Do your children go to school?
 - b. Who made that decision (you/spouse/in-laws)?
- V. During formation (Timeframe: This is within the first months that the SHG is in existence)
 - 1.) Difficulties met (yes/no for each)
 - a. Conflict with husband
 - Did your husband have a clear understanding of how SHGs are structured and how they operate?
 - b. Conflict with extended family (if living in extended family)
 - a. Did your family have a clear understanding of how SHGs are structured and how they operate?
 - c. Conflict with other member of the village
 - a. Did the community have a clear understanding of how SHGs are structured and how they operate?
 - d. Workload (stress)
 - a. Were you scolded for neglecting your duties?
 - b. Did you change your daily schedule (to avoid admonishment?

THINGS TO CONSIDER AFTER STUDYING VILLAGES

-Depending on the types of industries, research the possible technologies

Packaging/storage machine equipment

raw product prices middlemen replacement

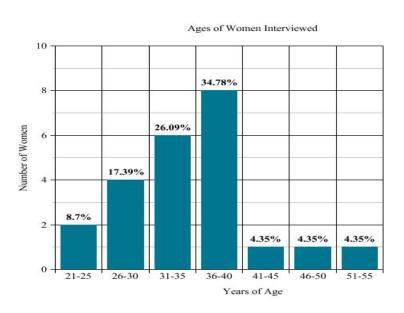
piece vs. wage work

correlation of size of SHG to productivity, etc......

APPENDIX B

RESULTS

I. Background: Age

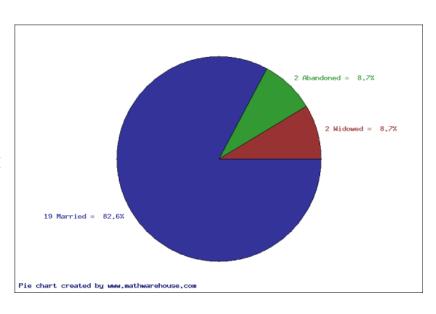


Most women were between the ages of 31 and 40. This is due to the timing of the Self-Help momentum, which has increased most rapidly within the last five years in Pondicherry. The number of SHG members increased up to a point: those 21 to 25 years old constituted 8.7 percent, 26 to 30-year-old women made up 17.39 percent, 31 to 35-year-old women represented 26.09 percent, and 36 to 40-yearold women had the highest

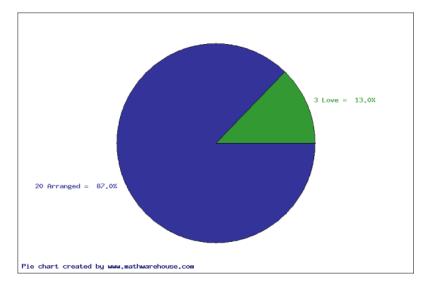
representation, over one-third of the sample. The older categories were low in number, each age group of 41 years to 45 years, 46 years to 50 years, and 51 years to 55 years making up only 4.35 percent of the entire sample.

Marital Status and the Conditions Thereof

As the pie chart indicates, the overwhelming majority of SHG members were married (82.6 percent). However, two (8.7 percent of the) women I interviewed had been widowed, and another category of the same quantity had been



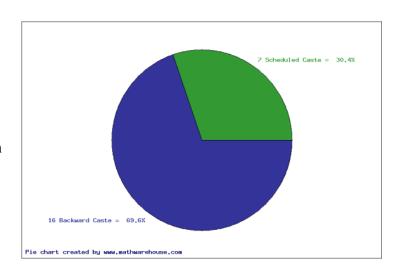
abandoned by their husbands.



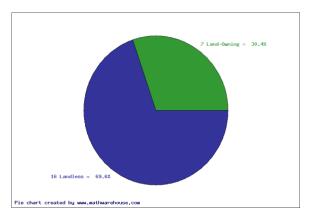
The chart to the left indicates the vast majority of women (87 percent) who were placed in an arranged marriage. Only 3 women, 13 percent, had married for love. This contrast to my own society was one of the major elements of culture shock I experienced.

Society Type

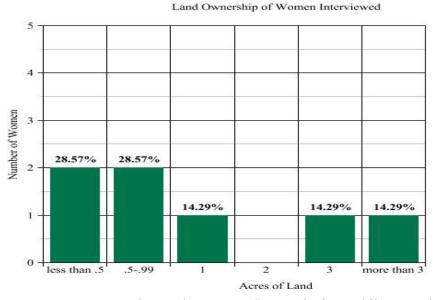
The two castes I ended coming into contact with were backward caste members, which proved most populous in SHG participation (69.6 percent), and scheduled caste (a euphemism for the Dalit, or untouchable, people) members, constituting 30.4 percent.



Land Ownership



Very few women I interviewed owned land; only 30.4 percent. The other 69.6 percent were landless.

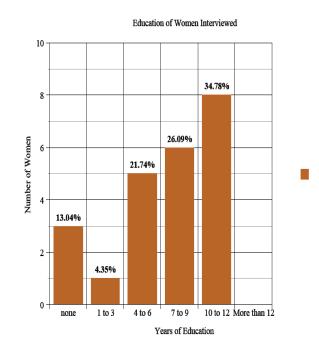


Of the women who did own land (or their husbands owned land), the area owned was extremely small. 28.57 percent owned less than half of an acre, another 28.57 percent owned between half an acre and one acre, 14.29 percent of the landowning women had one acre, none of the women I interviewed had 2 acres. 14.39 percent of landowning women owned 3 acres, and 14.9 percent of

women owned over three acres. In conclusion, while most did not own land, those who do own little on which to survive.

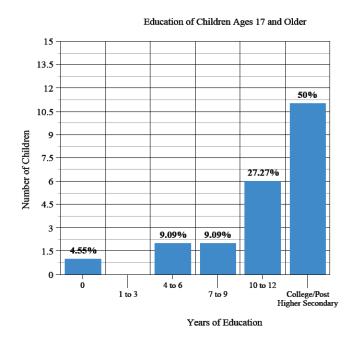
Education

As the graph depicts, the education level of SHG participants show remarkably high levels of completed years of education that was accessible to them. 13.04 percent of women had had no education whatsoever. Only 4.35 percent of women completed between one and three years of education. After this bottleneck, as more women reported to have higher education experience, a sanguine finding. 21.74 percent of women



completed 4 to 6 years, 26.09 percent completed 7 to 9 years, and 34.78 percent of women completed 9 to 11 years of education. One cutoff, however, was rather

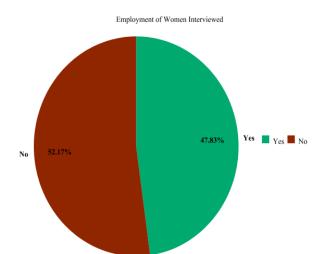
disturbing. None of the women I interviewed had had any education beyond higher secondary. What I inferred the case to be was that the women had ample intelligence, but lacked financial support from their parents. I wondered how that translated to the next generation.



The rise in education of children was drastic. For the SHG members' sons and daughters who were old enough to have complete schooling, the numbers showed radical improvement. Only 4.55 percent of the SHG members' children had not had any education. None had stopped between 1 and 3 years of education. 9.09 percent of the younger generation terminated their education after 4 to 6 years; the same was true of those completing 7 to 9 years of

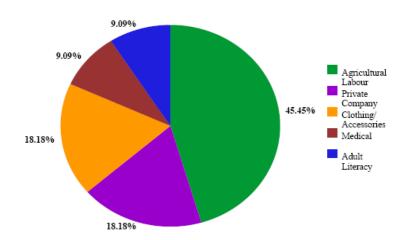
education. 27.27 percent of SHG members' children had experience or even completed higher secondary school. Lastly, 50 percent, the largest group of children, not only completed higher secondary school, but had gone on to study in a university or other post-high school training. This shift between generations portrays the motivation of SHG women in providing for their children's education.

II. Financial Situation Prior to SHG participation a. Income



Less than half of the women interviewed (48.83 percent) reportedly held jobs either temporary or permanent prior to participation in a SHG. A slight majority (52.17 percent) did not.

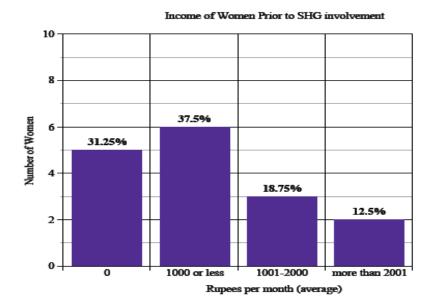
Types of Employment of Women Employed



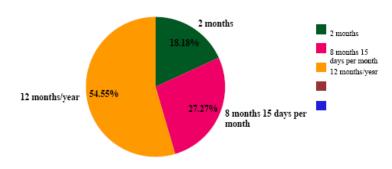
Among those employed, however, straining agricultural labor ran rampant in the interviews, holding the largest slice in the pie chart above (45.45 percent). Clothing/Accessories and Private Companies employed the next highest number of women, each employing 18.18 percent of women. Lastly, Adult Literacy and working in the medical field (specifically nursing), employed 9.09 percent of

women interviewed.

The bar graph shows the income produced by the women interviewed prior to SHG participation. Many women made no money at all (31.25 percent). The number of women who made 1000 rupees (about 25 dollars) or less per month was also extremely high, constituting 37.5 percent. As the income amount increased, the number of women in those situations decreased. Women making 1001 to 2000 rupees per month (25 to 50 dollars) made up only 18.75 percent of those interviewed. Those who

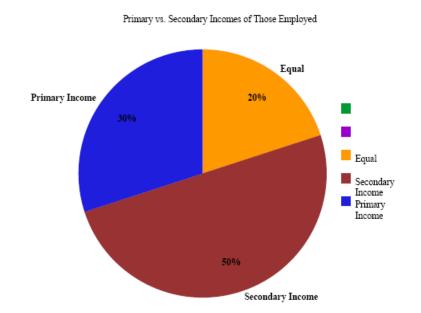


made more than 2000 rupees per month made up a small 12.5 percent of the women interviewed.



The stability of employment was determined by the frequency of work offered to the employed women. 18.38 percent of employed women worked only 2 months of work out an entire year. 100 percent of those in that situation were agricultural

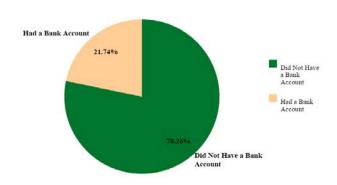
laborers. 27.27 percent worked 8 months out of the year, but only roughly 15 days of each month. Again, 100 percent of those in this situation were agricultural laborers. Over half of those employed (54.55 percent) reported to have worked 12 months each year. The occupations that made that situation possible were career such as bangle-selling, nursing, tailoring, adult literacy, and private company employment.



Of the women employed, a whopping 50 percent made a secondary income in comparison to their husbands. 20 percent of women made roughly the same amount of money as their husbands, and 30 percent of employed women were the breadwinners of their families.

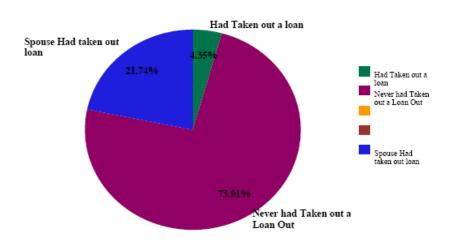
Bank Accounts Among Women Prior to SHG Formation

The measurement that was taken to assess the pecuniary knowledge associated with banks by observing how much they interact with a bank. The chart shows that the vast majority (78.26 percent) did not have an account; only 23.74 percent of women did. Many said they were afraid to even go inside a bank because they didn't know enough about it.



Involvement with Banks concerning Bank Loan Utilization

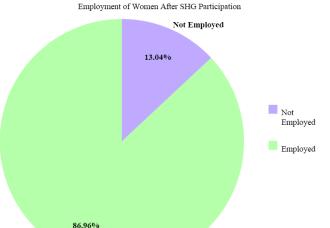
Again, few women had had any experience with loans. Only 4.35 percent of interviewed women had taken out a loan. 21.74 percent of women had not personally taken out a loan, but their spouses had. The overwhelming majority, however, had no experience whatsoever with bank loans.



III. Financial Situation After SHG Formation

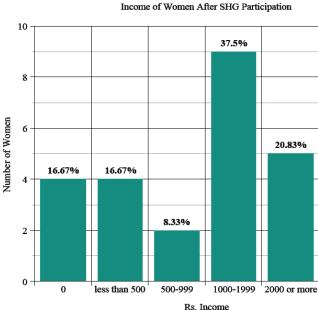
<u>Income</u>

Employed



After becoming active member of SHGs, almost all (86.96 percent) women now have jobs. Only 13.04 percent reported they were unemployed, 100 percent of them able to rely on another family member's income.

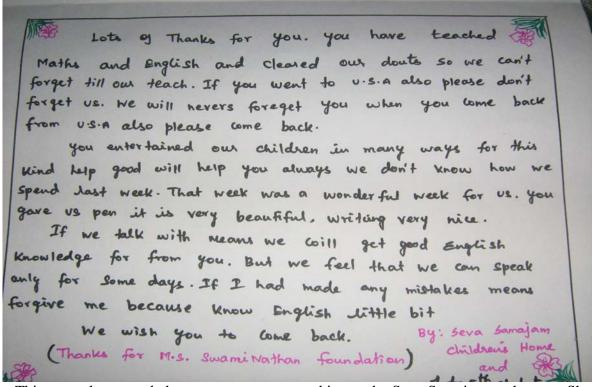
As the graph depicts, those who were not physically overtaxed (as 16.67 percent were) increased their income substantially. 16.67 percent of women individually earned up to 500 rupees per month, 8.33 percent made



between 500 to 999 rupees, the largest portion made Between 1000 and 1999 rupees, and 20.83 percent of women earned over 2000 rupees per month after joining an SHG.

APPENDIX C

Seva Samajam Children's Home



This was a letter made by a young woman working at the Seva Semajam orphanage. She spoke very little English, so this letter required much effort.



My class of 4th and 5th graders. They soon gave me the name, "Kathi sister."





After the lesson was over, I taught them the game of "Duck-duck-goose." (It only requires three words!)

Muthumal, myself, and Shashikala, two young women working at Seva Samajam. →





← One day after lessons, they surprised me with a beautiful drawing and letter with all the names of the students.



← The children were very warm towards me—and the camera.

I didn't teach them the hand signs they are holding up here; it shows the influence of American culture on other countries.





← The girls especially were very welcoming. When teaching, I found that most of the time, the girls had the correct answer to the problems, but wouldn't raise their hands. I got the feeling the boys received more attention in class.

PUDUCHERRY



This is the computer lab at the → Pillayarkuppam Village Knowledge Center (VKC). Here is SHG member, Devaki.

← Here is a training session at the Puducherry Biocentre.



These women in matching saris are members of Puducherry's BioVillage Council. →



← Here, a SHG is disbursing their first loan with Indian Bank at the Biocentre in Puducherry.





←The woman in the red sari is Rajalakshmi. She is the president of the BioVillage Council.

My supervisor, mentor, and mother to me in Puducherry, Dr. Sudarkodi. →





← Here are five SHG members I interviewed. From left: Selvi, Vishnupathi, Andal, myself, Saroja, and Viruthambal, all of Mangalam village.

The woman in the orange sari is Sumarthi, a SHG member. Her enterprise is the sari business. →





← Here is Sumarthi's SHG.

This picture was taken in the Biocentre. It illustrates the sense of community in the Biocentre.





◆ Water buffalo (I had never seen water buffalo in my life!)

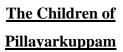
A woman in Senthanatham village →

Here is a young mother with her child. In the background is a poster of micro-enterprises that the MSSRF has facilitated for the SHGs.





← Here in the Puducherry metro, a man is carting a colossal load of oil canisters on a bicycle.









CHENNAI





My extremely kind guardians over the summer, Mrs. Amiya and Professor P.C. Kesavan.



The Professor Himself!



← Raji, who I later called my akka, or elder sister.

Here is Raji with my supervisor and mentor,
Dr. Sudha Nair. →





← This is Ms. Shanthi, who helped me immensely in structuring my project.



← The advertising style of Chennai. No space is empty space.



←The courtyard that the main MSSRF building surrounds. It showcases the 5 ecosystems of India.

The courtyard, also known as the "Clean and Green Campus," shown here in English and in Tamil.



Finally, my family at home (Dad, myself, Mom).

