

**IRRI:  
Looking Towards  
The  
Next Century  
Of  
Food Security**

**(Beyond Rice Research)**

**by**

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*Centers for Agriculture and Rural Development (CARD) members leave their weekly meeting.*

**IRRI: Looking Towards the Next Century of Food Security  
(Beyond Rice Research)**

My name is Martha Pope. I am from Mason City, IA. I graduated from Mason City High School May of 1999 and have been involved with the World Food Prize Youth Institute for two years. I helped write Mason City's paper in 1997 and 1998 and presented the paper in 1998. It was last fall when I first heard about the youth internship program and I was amazed by the opportunity to spend two months in a foreign country working to help alleviate some of the food problems that plague the world's population. I applied for the program at the encouragement of my teacher Mr. Tieszen, who is also the advisor for the Mason City group writing the papers for the youth institute.



I spent my internship in Los Banos, Philippines at the International Rice Research Institute (IRRI). IRRI is located about 60 km south of Manila. IRRI is a nonprofit agricultural research and training center whose purpose is to increase total food



production from rice-based farming systems, while protecting the environment and sustaining resources. It was established in 1960 with the help of the Ford and Rockefeller Foundations in cooperation with the Philippine government. The Philippines were selected as the site of IRRI for three major reasons: 1) The Philippines second language is English. Every Filipino speaks some English, which is extremely beneficial for an international institute. 2) The University of the Philippines-Los Banos is a major agricultural university in the world. And 3) the Philippine government offered the land to house the Institute. It is now funded by the Consultative Group on International

Agricultural Research (CGIAR).

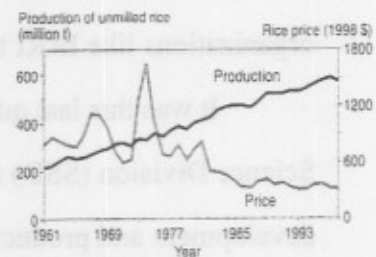
An international rice research center was established because one in every three persons on earth depends on rice for more than half of his or her daily intake of food. Ninety-one percent of the world's rice is grown and consumed in Asia. More than half of the world's population and about two-thirds of the world's poor live in Asia. Rice is also an important staple in the lives of the people living in Latin America and Africa.

Every day, 250,000 more people join the already overpopulated earth. Most of these innocent human beings are sentenced to a life of endless poverty. While 70% of the 4.2 billion hungry, malnourished, and impoverished people live in Asia, the focus of the world's conscience has been mainly in poor African countries.

The world's overlooking of Asia's needs for its people has left the problems of food security to rest on the shoulders of IRRI and other organizations like it. So far these organizations have been able to stay neck and neck with the growing population. Farmers have been able to grow 2.5 percent more rice each year since 1965. This additional rice has fed an extra 600 million people. This rise in production can be attributed to high-yielding modern varieties of rice, more irrigation, and easier access to credit.

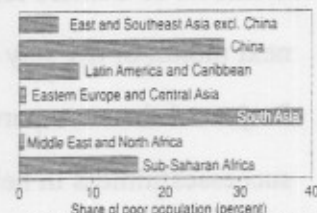
Political stability in Asia can be led directly to the price of rice. A secure supply of rice has typically guaranteed food security as well as political, economic, and social stability. According to IRRI economist Mahabub Hossain, "The first sign of civil unrest can often be traced to rising rice prices." Asia is truly ruled by rice.

Trends in world rice production and price



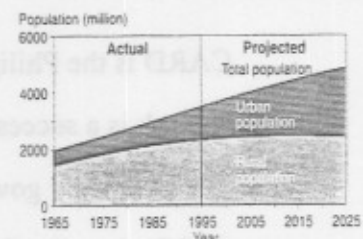
Source: Production: IRRI/IRRI Database, 1999  
Rice price: Based on the rice 5-percent broken using the C 5 IRRI index collection, World Bank Quarterly Review of Commodity Markets.

Poverty in developing economies in 1993



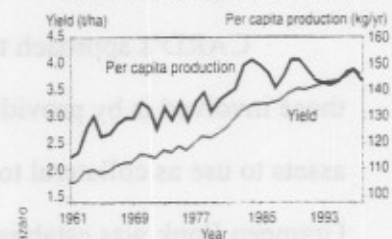
Source: World Bank, 1994, Poverty Reduction and the World Bank: Progress and Challenges in the 1990s.

Projected population and urbanization in Asia



Source: United Nations, 1992, World Urbanization Prospects: The 1996 Revision.

Rice yield and per capita production in Asia



Source: IRRI/IRRI Database, 1999

but when there isn't enough to feed it's population, what will happen?

Another billion people will be added to Asia alone, by 2020. Will there be enough food, mainly rice to feed today's population and the future billions? Is it going to be possible to get the food to the people who need it? What more can be done, so that these poor people can help secure their futures without a total dependency on organizations like IRRI to grow the "magic" rice that will feed the world?

It was this last question that I was assigned to look into. I worked in the Social Science Division (SSD) at IRRI. I ended up not having anything to do with the development and production of rice itself. I was assigned to work under the direction of Lina Diaz, an assistant scientist in SSD. For the first month of my internship I evaluated members of Centers for Agriculture and Rural Development or CARD for short. The next month of my stay I worked with the IRRI Neighborhood Community Development Project. I then compared the two programs and evaluated the program's successfulness in helping the futures of the Filipinos involved.

### **Centers for Agriculture and Rural Development**

CARD is the Philippine replication of the Grameen Bank in Bangladesh. The Grameen Bank is a successful micro-credit program of reaching poor households that are regularly bypassed by governmental financial institutions. CARD, a non-governmental agency (NGO), has distributed over P82 million since 1990, and has succeeded in recovering that entire amount.

CARD's approach to the alleviation of poverty and improving the livelihood of those involved is by providing credit and organizational support to those who do not have assets to use as collateral to formal financial institutions. CARD's replication of the Grameen Bank was established in 1990, adopting the essential elements of Grameen. These elements include: 1) Targeting women from low-income households. 2) Taking the bank services to the village rather than asking the people to come to the bank. 3)

Organizing the borrowers into groups of five like-minded people and then federating five to eight groups into Centers. 4) Requiring each Center hold weekly meetings on a fixed day of the week which are then attended by CARD field workers. 5) Using peer pressure to ensure repayment of loans and 6) requiring the loan to be repaid within a year in weekly installments of two percent of the loan so the loan is not a burden on the household.



I spent the first three days of my evaluation process sitting in on CARD meetings. I went to three different CARD Centers, each in an economically different area.

The first CARD meeting I visited was Oliva. The Oliva Center is a group of forty women in a

very rural area. Mrs. Diaz and I had to walk a kilometer and a half through rice paddies just to get to the meeting site. These women showed a definite sense of community and unity by the matching lime green shirts they were all wearing. These women had been meeting every week for six years. They had various types of loans, ranging from emergency to multi-purpose, from burial to educational.

The second CARD Center meeting I went to was Tranca. Tranca is a "barangay" or village, near IRRI. This group is better off economically than the Oliva Center because it is situated near the main road going through Tranca. Here three women invited me to stay with them for a few days.

I first stayed with Elsa Tamban and her family. Elsa felt that being a member of CARD has helped her and her family. Her pig business is mostly funded through her CARD loans. She said that because of CARD she had been able to buy things for her family she otherwise may not have been able to. Elsa and her family live in a modest house with amenities like a TV, VCR, and a karaoke machine. She seemed very happy with how CARD has helped her.

The second family I stayed with was the family of Lolita Manila. Lolita did not have the same sentiments about CARD as fellow group member Elsa Tamban. Over and over again she told how she and her family was so poor. She would also tell me how the economy was so bad and that none of the men could find jobs. I asked whether or not she thought CARD had helped her and her family. Her response was "No, there were always payments to be made to repay the loan." One of the projects she used her loan for was a sari-sari store (a variety store). This "store" was a table that held a jar of juice and a few bar cookies. I didn't even notice the table until the third day I was there when a customer came to buy a drink. This was the only customer that came in the three-day period I was there.

The object of getting a loan is to have a project that would eventually make capital to improve the family's lives. Whatever the project is, whether it be a sari-sari store or hog raising, it requires time and input to make the project successful. What I saw at the Manila house was a case of "if-we-set-the-table-out-there-then-it-will-automatically-make-money." I questioned the family's expectations of CARD. This was not a program set out to make thousands of Filipinos rich-this is a program set out with the goal of helping thousands of Filipinos live without poverty and improve livelihood. From what I observed, there seemed to be no reason why this sari-sari store couldn't help supplement the family's income like it was intended to. There were plenty of unemployed men sitting around (and from what I was told, this is what they did everyday) who could use their time and resources to make the sari-sari store profitable, contributing to the family income.

The last CARD member I stayed with was Fely Achillas. Fely lived in Tranca with her husband of 22 years and four of her five children. Of the three CARD members I visited, Fely is a definite success story. Fely has educational and project loans. Fely herself only has a high school education, but it is important to both her and her husband that all of their children get a higher education. Her eldest daughter is a secretary at a

major company in the Philippines and her second daughter is taking a business statistics course in college.

Fely also has a small business of buying and selling papaya, ginger, ice candy, and paminte spices. Through CARD, she has learned how to make her business a success. Because of the success of her business she has been able to make improvements to her house. She has a few piglets that are also partly supported by her CARD loans. Fely has worked hard for her family to live comfortably and for her children to receive a good education.

The third CARD center I went to was S.A.K.S.A. S.A.K.S.A stands for "Samahan ng Kababaihan" sa San Antonio, meaning women's association in San Antonio. Because San Antonio is situated on the shores of Laguna de Bae, their economic system is derived from the water. Many of the women had projects such as drying and selling fish.

All of the CARD center's I visited had 97% attendance and 100% repayment of loans. These numbers are not unusual for any CARD Center.

### **IRRI Neighborhood Community Development Project**

In 1993, the IRRI Neighborhood Community Development Project was started with the goal of assisting the communities surrounding IRRI to be self-reliant and sustainable, hence enhancing the incomes and livelihoods of their members, most of whom are IRRI employees belonging to the low income group.

Eves Loresto, a plant geneticist, is chairperson of the IRRI Project and its members are made up of a variety of IRRI employees. A pilot program was established in July of 1993 in the barangay Paciano Rizal on the east side of IRRI. The initial activities included leadership training of potential barangay leaders and proper waste management. Because the impact of these activities in Paciano Rizal were so huge, other

neighboring communities requested similar assistance from IRRI.

IRRI now supports the six barangays surrounding IRRI. After profiling each of the communities, the prevalent problems are in the areas of health, nutrition and sanitation, and income generation or means of livelihood to supplement family income. Each of the communities present a proposal to IRRI regarding their community needs to help improve the livelihood of the community. The Project group then decides what is best for the community. Some of the current projects are: ornamental gardens, making stuffed toys and quilts, communal septic tank, a small-scale water system, and community libraries. The Project group does not give money; rather it gives the training and resources to achieve a better livelihood.



*Paciano Rizal Daycare*

I visited two daycares in two different barangays. IRRI helped start the daycares and has given chairs, desks, and bookcases to the daycares. These daycares are for children ages three to six and not only provides the children with an education in reading and writing but also teaches them healthy practices like hand washing and brushing teeth.

I next visited the Putho-Tuntungin Health Center. I went on a Wednesday, which is Well Baby Clinic Day. On this day, mothers brought in their babies and young children to get immunizations. There are three women working at the center. There is a head nurse, hired by the city of Los Banos and two volunteer trainees. It was founded in 1970. On an average Wednesday, there could be as many as 70 patients, many waiting in line for immunizations to help ensure the health of the next generation.

The center is housed in a small building packed with medical supplies. There is a refrigerator, donated by IRRI, to keep all vaccines and medications that require refrigeration. IRRI has also donated other medical supplies such as stethoscopes,



pulmonary aide, and Baumanometer for taking blood pressure.

There are ten programs for better health and care at the Putho-Tuntingin Health Center. These ten programs are: immunizations, pre-natal care, post-natal care, birth control, Tuberculosis, diarrhea diseases, nutrition, leprosy, and filariasis. There are no cases of Malaria, leprosy, or filariasis. This center appears to serve the needs of the community and it helping improve the general health and well being of its citizens.

Another project I visited was an ornamental garden at the home of Eugenia Cuevas, also in Putho-Tuntingin. Mrs. Cuevas augments her family's income by selling her ornamental plants. I was impressed with many varieties of plants and by her landscaping. She and I planted numerous plants and I was introduced to all of the varieties she grows. IRRI has provided garden tools, nets, garden soil, and plastic bags and has trained Mrs. Cuevas and others in growing and selling ornamentals.

I then spent a weekend in the home of a Filipino family. I lived with Pastor and Bella Gregorio. Mrs. Gregorio is the principal of Jesus Saves Christian Community



School (JSCCS). Being immersed in the Filipino culture proved to be very enlightening, giving me insight of the day-to-day existence of this society.

I attended JSCCS for a morning and then went to the capital of the province Laguna and met the Governor of Laguna, Joey Lina. Gov. Lina has started a program called F.A.I.T.H., Food Always in the Home. This program is to train and enable the citizens of Laguna to grow enough food for their families so they will not go hungry. All of the food can be grown on any family's small plot of land around their house. I visited the demonstration plot where I saw corn and green beans growing together to save land space. There were vegetables growing in plastic cups, old tires, and dried coconut shells. There was a small pond that supported ducks and fish. There was also small cage of quails, providing meat and eggs to sell and eat. It is Gov. Lina's belief that no family should go hungry and this is his way of helping the citizens

who elected him to his present office.

The last IRRI supported project I went to was a stuffed toy business at the home of Malou Carandang. IRRI has trained Malou how to make stuffed toys, quilts, and clothing, and how to operate an industrial sewing machine. IRRI has also supplied materials and training in marketing and entrepreneurial skills.

### **Program Evaluation**

Both the CARD program and the IRRI Neighborhood Community Development Program are great programs in reaching out and helping the low-income sector of the Filipino society. Both have accomplished, and still are accomplishing, what they set out to do. Both have their benefits and drawbacks, but I feel the IRRI program is reaching out to people more effectively.

CARD has helped many women supplement their incomes and improved their families lives. However, it is a program geared to the individuals who get out what they put in. For some families this has been a lifeboat on a sinking ship, but others do not want to take the time to detach the lifeboat. There seems to be a sense of confusion that improving one's life does not necessarily come in the form of a TV or karaoke machine.

The IRRI program is community program that allows communities to work together to improve everyone's well being. Daycares have been set up, water systems installed; first aid and fire prevention training has taken place. All of this has been done without a direct outpour of money. Resources and training have been given and both individuals and communities have built upon that. I feel that this program is the best one to reach out and help as many people without the emphasis being on money. This program seemed to be the most effective outreach, reaffirming the Chinese proverb "Give a man a fish, he will eat for a day. Teach a man to fish, he will eat for a lifetime."

My internship was unique, in that I didn't actually do scientific research. My "basic" assignment was to observe and be conclusive. In contrast to my own perspective there were many differences I noticed in the Filipino culture. One of the main difference

I saw was the slower pace of life. The atmosphere was extremely relaxed. Unfortunately this slow pace leads to low productivity and laziness, especially among men. The Philippine culture is definitely a matriarchal society. The women run the household and tend to be the breadwinners. Men and women are treated as equals. Unlike other Asian countries, daughters in the Philippines are given opportunity in any field, especially to go to school and get a higher education.

Their value system seems to be based on what they think are the American ideals. Most families I visited seemed to strive to get a TV, VCR, karaoke machine and collect McDonalds Happy Meal toys. Every Filipino I met was warm and kind. There is a definite sense of family and community. As one member of the Tranca CARD group said as the group was donating money to a member who's husband was in the hospital, "This is what we do, we help each other."

I had a fantastic experience in the Philippines. I learned a lot about myself and the internship has given me a new direction in life. I have decided to major in International Studies (and a primary major I have yet to decide) rather than Architecture. I have made some wonderful Filipino friends



I would like to thank everyone who has made this internship possible. A special thanks goes out to the World Food Prize for giving me this opportunity. Thanks to IRRI for letting me come and work there. Thanks to Lina Diaz, Joyce Luis, Doris Malabanan, Rene Villano, Joel Reano (for driving me everywhere) and everyone else in SSD, I definitely wouldn't have had a good as time without all of you and thanks for taking me around this beautiful county of yours. Thanks to everyone with the IRRI project, especially Lito, who took me everywhere in the morning and let me use his computer in the afternoon. Thanks to the Bell family for letting me house/dog sit and letting me stay when you returned-it really made my stay a lot easier being in a house and with a family. And last but not least, thanks for my parents for letting me leave the country by myself

for two months. Everyone was so nice to me during my stay and this has been a wonderful experience that will be a part of my life forever.

**Bibliography**

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