# The Grupo Fenix 2007 Progress Report



Written by Grupo Fenix members: Noel Dekking, Julio Angulo Gareta, Susan Kinne, and Amanda Baran

# Mujeres Solares de Totogalpa and Solar Cookers:

2007 has been a break out year for the solar women of Totogalpa as they received national recognition for their work with solar cookers by the Nicaraguan government and country-wide media outlets. With funding from the Body Shop Inc., the Nobel Fund, and the prize money from the Ministry of Energy, the women plan to continue their environmental conservation and education work.

#### 1. Estelí Solar Cooker Competition:

- ✓ First place finish in a solar cooker construction-bid competition held by Universidad Nacional Autonomo de Nicaragua and the city of Estelí.
- ✓ With the \$5,000 grant and additional funding from The Body Shop Inc. the women built 22 solar cookers for citizens and schools in Estelí. The event was celebrated at city hall with a two day workshop hosted by Nimia Sanchez, president of the women's group, CJ Colovito, Grupo Fenix volunteer, the Mayor of Estelí, and representative of the solar women. The workshop allowed the women to teach the recipients the uses, maintenance and science of solar cookers.
- ✓ Work on the solar cookers for Estelí was carried out by members: Nimia Lopez Sanchez, Rumalda Lopez Lopez, Maria Alejandra Sanchez, Elia Maria Perez, and Reyna Isabel Lopez Rizo.
- ✓ The event was nationally publicized in an article written by volunteers Noel Dekking and Julio Angulo Gareta and published in El Nuevo Diario, one of Nicaragua's most popular newspapers.

#### 2. National Renewable Energy and Conservation Competition:

- ✓ Second Place prize and recognition by EuroCentro, the National Ministry of Energy, German and Austrian Tehnical Aid, and others for Las Mujeres Solares de Totogalpa's work with solar cookers, environmental education and conservation.
- ✓ Received cheque for 8,000 Cordobas (\$450) to continue with their community development and solar cooker work.

### 3. Engineers for a Sustainable World – Research and Design:

- ✓ Engineering students from Cornell, Ohio State, Olin, Berkley and MIT spent three months working on research and development of solar cookers through the Engineers for a Sustainable World program.
- ✓ Students did testing of existing models and by working with the women came up with various design improvement and cost efficiency suggestions, as well as designed and built their own solar cooker as an exemplary prototype.
- ✓ Prototype construction and design instructions, as well performance test results, were electronically documented for use by Grupo Fenix interested organizations.

#### 4. Creation of volunteer housing matrix:

✓ To avoid any biases in the volunteer housing selection process, which represents an income of \$50 per month, an objective set of rules was created to ensure equal opportunity access.

#### 5. Solar Cooker Repair Team:

- ✓ Funds for projects raised by students from Cornell, Berkley, and MIT universities through the Engineers for a Sustainable World program, also known as Summer Engineering Experience in Development (SEED).
- ✓ The Solar Cooker Repair Committee is comprised of Maria Alejandra Sanchez, Rumalda Lopez Lopez, Reyna Isabel Lopez Rizo, Nimia Lopez Sanchez, Kenia Damaris Perez, Elia Maria Perez, and C.J. Colavito, all of whom volunteered to undergo training and begin solar cooker reparations.
- $\checkmark$  All solar cookers have been visited and the needed repairs documented.
- ✓ Team attended workshop delivered by Marcio Perez to develop Mujeres Solares carpentry skills in preparation for repairs.
- ✓ Budget has been written, money has arrived from Managua and repairs are planned to begin November, 2007.

#### 7. Education and Scholarship Committee:

- ✓ Funds for scholarships donated by course participants and volunteers Lori Hanna, Brian Bellamy and George Haselton, SEED, and others.
- ✓ The Education Committee is comprised of Rosa Amalia Martinez, Bertha Lopez, Glenda Isabel Lopez, Mayra Azucena Lopez, and Nury Banesa Diaz of Las Mujeres Solares de Totogalpa and international volunteer C.J. Colavito, all of whom volunteered to administer the scholarship.
- ✓ The committee has established a set of rules for the selection process of the scholarship so as to avoid any biases or unfair advantages.
- ✓ Applications are to be past out the week beginning November, 19, 2007 and then collected for review and reward process one months later.

#### **Planned Progress:**

- Moving the workshop into the Noble Solar Production Centre.
- Buy new tools and materials for building solar cookers.
- Continue with design improvements.
- Create a marketing campaign for solar cookers.
- Continue community outreach and education of solar culture.
- Promoting the women's group, as well as their work with and use of solar cookers.
- Begin work on industrial size Solar cooker with research assistance from Cornell.
- Develop artisan shop to sell homemade arts, crafts, food and coffee.
- Develop plan for export of dried foods, solar coffee, etc...

# Centro Solar:

After resolving some construction material shortages at the beginning of the 2007 - and thanks to the hard work of the solar women, their family members, volunteers, and a local construction team - work on and around the Noble Solar Production Centre should be completed before the end of the year. Plans to build a large PV system to power the Noble Solar Production Centre, and then to move Don Marco's Solar PV workshop and the Solar Cooker workshop into the building are in the works.

#### **1. Noble Solar Production Centre:**

- ✓ Installed: Traditional style roof, tiled floor, interior and exterior adobe walls and white wall finish, locally made doors and windows, locally made solar panels, solar powered lighting and electric system, replacement solar panel for water pump, and a building sign.
- ✓ All work done as a result of cooperation between community members, local experts and international volunteers.

#### 2. Security System:

- ✓ Security plan for building as of November, 12, 2007 has been designed by Noel Dekking, Don Marco, Antolina Ortega Hernandez and C.J. Colavito. It is currently being put into place. Funding provided by St. Andrew's United Church in Moosejaw, Canada.
- ✓ Barred window and ceiling for protection of tools and valuables have been installed.

#### **Planned Progress:**

- Inauguration planned for December, 12, 2007.
- Grant proposal for massive electrification of the centre, and the subsequent moving of both solar photovoltaic and cooker workshops into the building has been written and awaiting response.

#### 2. Centro Solar Property:

- ✓ New fruit trees (Noni, Papaya, Passion Fruit) have been planted, cage structures to support organic plants have been built, grass and weeds cut, walkway built, and organic gardens maintained.
- ✓ Walkway in construction as of November, 20, 2007 thanks to funds from St. Andrew's United Church in Moosejaw, Canada.
- ✓ All work done as a result of cooperation between community members, local experts and international volunteers.

#### **Planned Progress:**

- Guard/Water-pump house has been planned; adobes are to be built in November.
- A roadside sign for the Solar Centre and Noble Solar Production Centre
- Large gate and pavement for entrance way
- Research for grants and funding to support continued construction of buildings and facilities for the Centro Solar.

- Construction of gate and pavement for entrance way
- Research for grants and funding to support continued construction of buildings and facilities for the Centro Solar.

# Don Marco's Photovoltaic Workshop:

Marco's workshop has continued to build solar panels and install photovoltaic systems throughout northern Nicaragua. It has also acted as a renewable energy training centre, educating both Nicaraguans and international volunteers in the construction, installation and maintenance of solar panels. Marco and Susan have recently come to an agreement that will see the workshop officially join forces with Grupo Fenix by becoming a financial partner in the CIPPER project. CIPPER is the creation of a formalized NGO division of Grupo Fenix.

#### 1. Panel production and installation:

✓ Continued as per market demand.

#### 2. Yo Si Puedo Project:

✓ The workshop has been working with Yo Si Puedo by installing PV systems at schools located in the mountains of rural Nicaragua. This is to provide light and electricity for adult education programs that can only be given at night after the regular work day is done.

#### 3. Training Nicaraguans and international volunteers:

✓ Volunteers and locals Nicaraguans alike have been trained by Marcos and Mauro Perez in their PV panel production techniques.

#### 4. Research and development:

✓ Continued research for the production of cheaper and more efficient panel construction. Continued market research for potential cliental and partnership.

#### **Planned Progress:**

- Integration of the workshop into a formal and financial partnership with Grupo Fenix through the creation of CIPPER.
- Construction of solar panels for further electrification of Noble Solar Production Centre.
- Possible move of workshop into Noble Solar Production Centre.
- Don Marco, Martin Rollectschek, and Noel Dekking are researching low wattage panel production for potential partnership with Light Up Costa Rica. Could provide an annual demand of 50 to 100 small panels.
- Further development of a marketing campaign.

# Tienda Verde:

Having been a long time dream of Grupo Fenix to develop a way to pay back the hours and hours of dedication put forth by Las Mujeres Solares de Totogalpa, to say that creation of Tienda Verde was a big success in 2007 is an understatement. The effort was realized in great deal due to the devotion and enthusiasm for the project by Grupo Fenix volunteer Charlotte Ross.

#### **1. Creation of Tienda Verde:**

✓ The Tienda Verde is both a motivation and way to reward the hard work of the Solar Women of Totogalpa without the need for money. As an incentive to each woman's continued dedication to the Solar Center and its future, the Tienda Verde is a store containing mostly donated goods which can be bought with the work hours that they have accumulated since November 2005. With her own bankbook in hand, each member arrives on the second Saturday of each month to shop for goods such as school supplies, clothing, shampoos, toys, and even solar cookers. The opening of the store offered a way to celebrate and repay the large effort each of these women has made to the future of Sabana Grande.

#### 2. Acquisition of support funding and item donations to ensure store provisions:

✓ Personal item donation on the behalf of Grupo Fenix staff, their families, Dayton University group, and SEI course attendants, Engineers for a Sustainable World volunteers, and other interested individuals have provided the store with lots of great items as wells as financial support.

#### 3. Transfer of job responsibilities to a local Nicaraguan:

✓ Kenia Perez, a Sabana Grande local and member of the women's group, has taken over the management of the bank/work-hour accounts. Antolina Ortega Hernandez, another member of the women's group, will continue with the purchasing and acquisition of goods for the store.

#### **Planned Progress:**

- Researching sustainable sources of income and goods to maintain a steady flow supplies for the store.
- Creation of a suggestion box or book so that the store items better reflect the desires of the women's group.

# Micro Loan:

As an organization, Grupo Fenix is always striving to create projects that are not only sustainable, but also equally beneficial to the stakeholders. The creation of the Micro Loan program by Charlotte Ross enables women of Las Mujeres Solares who do not have the facilities to benefit from the volunteer home-stay program to take out a micro-loan for the acquisition of the required materials to be able to provide this service.

#### 1. Creation of the Micro Loan:

✓ This has been an important addition the organization because it helps to avoid situations of inequality. Each member of the women's group has access to the income generated by housing a Grupo Fenix volunteer (\$50 per month). However, as not every member possesses the conditions of security and comfort in her home needed to house a volunteer, this opportunity was limited to a minority who repeatedly benefited from this cultural and monetary income. Since the founding of the Micro Loan for housing improvements or additions, this has become a more equal system. Women who have never before housed a volunteer and who are active in the GF projects are given preference in the selection process for loans of up to \$150. With this amount or less, the Solar woman can make the needed improvements on her home. Because they gain access to the next volunteer opportunity, the borrower will automatically repay the loan with the \$50 rent each month. After the loan is repaid in full the member is free to earn the money from housing or simply make use of her new space as she sees fit.

#### 2. Implementation:

- ✓ The program's first candidate, Elia Maria Perez, took advantage of the micro-loan to build an addition onto her home the last week of June, 2007. Since then, Elia has already paid back her micro-loan and is currently receiving an income from her second home-stay volunteers.
- ✓ Three more candidates have taken out the micro-loan for home improvements or additions and will be set in queue to receive a home-stay opportunity upon completion of their respective projects.

#### 3. Transfer of job responsibilities to a local Nicaraguan:

✓ Nicaraguan Grupo Fenix staff members, Antolina Ortega Hernandez and Erika Gonzalez Garcia, have assumed the responsibilities associated with new loan applications, maintaining ongoing loans, volunteer housing implications the closing of loans after repayment.

#### **Planned Progress:**

- Permanent and continued attention to outstanding loans, repayments, and project proposals is required for the micro-loan project.

- Advertising volunteer opportunities with Grupo Fenix is a critical variable to the sustainability of the micro-loan program.

# Workshops and Courses:

The solar culture courses remained an essential aspect of Grupo Fenix throughout 2007 for a number of reasons. Courses provide the opportunity for hands-on experience and a theoretical background to individuals interested in renewable energy. They are an excellent opportunity for cultural exchange between the solar women and course participants. They also provide a much needed source of income for the organization, which is used to pay our employees, as well as additional home-stay income opportunities for Las Mujeres Solares de Totogalpa.

#### 1. 2007 Courses:

- ✓ Solar Culture Course I: An intensive week long course in January that provided participants with practical skills and a theoretical background in both photovoltaics (PV) and solar cookers, as well as cultural and ecotourism experiences of Nicaragua. Participants built PV battery chargers, a solar dryer, experienced a residential PV installation, and covered the respective theory for each aforementioned hands-on activity.
- ✓ Alternative Spring Break Solar Experience course: Organized by GF employee Page McClean, was held in March as an option for students looking for a more educational getaway. Four participants.
- ✓ Minnesota/ Costa Rica/ Nicaragua Semester Abroad Course: Organized in participation with Miguel Karian, this course offered a three day theoretical background of solar cookers, photovoltaics and renewable energy installations.
- ✓ Cornell University Solar Cooker Course: Provided practical skills and theoretical background for solar cooker construction, use and maintenance. Took place in March. Six students and one teacher participated.
- ✓ **Dayton University and ETHOS course:** Provided a course that satisfies the Service Learning Opportunity to engineer students at Dayton University. Took place in May. Nine students and two professor participants. Course provided practical skills and theoretical background for solar cookers and battery chargers; photovoltaic installation theory; and ecotourism experiences.
- ✓ Solar Culture Course II: An intensive week long course in August that provided participants with practical skills and a theoretical background in both photovoltaics (PV) and solar cookers, as well as cultural and ecotourism experiences of Nicaragua. Participants built PV battery chargers, a solar cooker, assisted in a PV installation at the Noble Solar Production Centre, and covered the respective theory for each aforementioned hands-on activity.

- ✓ Solar Energy International: A week long course in November that provided participants with practical skills and a theoretical background in photovoltaics (PV), solar cookers and other renewable energy sources, as well as their applications in the developing world. Participants built PV battery chargers, two solar cookers, assisted in a PV installation at the Noble Solar Production Centre, and covered the respective theory.
- ✓ Adobe Work Brigade: A course organized to teach participants the theory and practical methods for the construction of adobe buildings. This environmentally building technique uses age old construction knowledge and relies on locally abundant materials so as to limit stress on Nicaraguan forests. Participants will be making adobes that are to be used at the Centro Solar for the pump house/guard station.

#### **Course Instructors:**

- ✓ Dr. Richard Komp: Doctorate in physical chemistry, 45 years of solar energy experience, president of Maine Solar Energy Association, owner and president of Sunwatt Corp. as well as director of Skyheat Associates. Richard has been working with Grupo Fenix since 1997 as an instructor, advisor, and much more.
- ✓ Susan Kinne: Electro-mechanic and electronics technical degrees, Coordinator and founding member of Grupo Fenix, 18 years with the National Engineering University of Nicaraguan where she is also the Director of the Alternative.
- ✓ Marco Perez: Technically trained in photovoltaics and solar system installations. Marco's technical and practical experience is highly advanced in the building, installing and maintenance of PV systems. He has also developed a more economical method for homemade panel construction as wells as gained a lot of experience with renewable energy in a development setting. With Grupo Fenix since 1999.
- ✓ Mauro Perez: Technically trained in photovoltaics and solar system installations. Mauro's technical and practical experience is also highly advanced in the building, installing and maintenance of PV systems. Working out of Sabana Grande, he has gained a lot of experience with renewable energy in a development setting. With Grupo Fenix since 1999.
- ✓ Nimia Lopez Sanchez: President of Las Mujeres Solares de Totogalpa. Extensive experience in the technical background and construction of solar cookers, as well as in their maintenance, utility, and environmental and health benefits.
- ✓ Marcio Perez Lopez: Local carpenter with years of experience building solar cookers. Essential for the hands-on construction of the cookers.
- ✓ Rumalda Lopez: Member of the Mujeres Solares, Rumalda brings invaluable knowledge of solar cooker use and delicious recipes to impart with course participants. She has also been cooking with soy as a primary ingredient for years and teaches participants about its health benefits as well as some recipes.

- ✓ Maria Alejandra Sanchez: Member of the Mujeres Solares, Alejandra is one of the most experienced with the uses of solar dryers, especially in their use for medicinal plants and organic herbal medicines. Alternative natural medicine is regaining worldwide interest and Alejandra's course component is always well received.
- ✓ Laurie Stone: International program director for Solar Energy International with experience in renewable energy application in development settings. Technical background to solar energy, including off-grid and grid connected systems, system sizing, and system design.

#### 2. Improvements:

- ✓ Grupo Fenix is constantly making changes and improvements to courses so as to keep up with technology, and also respond to the suggestions of past participants.
- ✓ Amanda Baran has joined the Grupo Fenix and will be working closely with course preparation and improvements
- ✓ Amanda updated Website, conducted a participant feedback analysis, created a Grupo Fenix contact list, and has translated documents and technical manuals so that they are available in both Spanish and English.

#### **Planned Progress:**

- Improved advertising campaign.
- More relationships with Universities.
- Continued course development and investigation, possibility of a bio-fuel course.
- Organising existing courses for 2008.
- Development of the month long Centre for Ecological Living and Learning semester abroad course.

# Reforestation:

#### 1. Solar Mountain and Asociación por Desarrollo Rural Adventista (ADRA)

- ✓ 14,000 indigenous species trees, including mahogany and local cedar, were planted on the Solar Mountain. The program was carried out in partnership with ADRA's work for food program, financed by USAID.
- ✓ Program was organized and carried out by local Nicaraguans, including members of Las Mujeres Solares de Totogalpa.
- ✓ Local forestry methods, such as underbrush utilized for dike irrigation, implemented to help with soil conservation.
- ✓ Local forestry methods, such tree spacing, tree competition limitation, and underbrush management implemented for forest fire prevention and support of stronger tree growth.

#### 2. Drip Irrigation and Asociación por Desarrollo Rural Adventista:

✓ Edwin and Vidalia Perez teamed up with ADRA for a drip irrigation system that was used on agricultural production of tomatoes and sweet peppers.

#### 3. Local Agriculture:

✓ Planting of local crops such as beans and corn on flatlands by community members for food production.

#### **Planned Progress:**

- Five year visioning session planned for Solar Mountain in August, 2008.
- Continued research for further forestry projects.
- Formalization of agricultural use of the Solar Mountain.

# **Bio-digester:**

The bio-digester demonstration site at Don Marco's house is yet another example of alternative energy use. The methane captured is a clean burning fuel that can be used as a cooking alternative to fire wood, thereby limiting the reliance on already ravaged forest lands.

#### 1. Repair Bio-digester:

- Using of Edwin Gonzalez's home made push car, and the help of volunteers Charlotte Ross, Johnathan Janeway, and Martin Rollectschek, the bio-digester team collected enough manure this November to get the newly repaired bio-digester back up and running.

#### **Planned Progress:**

- Monitor bio-digester performance.
- Maintain bio-digester in working condition.
- Write bio-digester funding proposal and seek out project partner for Centre Solar.
- Develop a local group to learn about biodigestors, build more, work with volunteers to improve process and eventually teach workshops as done with PV and cookers

# CIPPER:

CIPPER is the Centro de Investigación, Promoción, y Producción con Energías Renovables. While a number of the projects and programs in this report are already functioning as part of CIPPER, one of our main goals is to transform the department into an official NGO division of Grupo Fenix.

#### **1. Defining CIPPER and Goals:**

- ✓ With the help of Amanda Bran, Nimia Lopez Sanchez, Nina, Marcos Perez, C.J. Colavito, Jenny, Erika, the official ideas that CIPPER represents were constructed into a concise organization definition.
- ✓ Goals and visions for the organization were outlined by Grupo Fenix members. Increasing the communication network that enables exchanges between researchers, students, business and other organizations interested in renewable energy.

#### 2. Development of Workshop Electrification Proposal:

- ✓ Lead by volunteer Julio Angulo Gareta, and with assistance by Grupo Fenix members Noel Dekking, Director Susan Kinne, Marco Perez and Nimia Lopez Sanchez, CIPPER's first potential financial project was developed and proposed to Recreational Equipment Inc. for funding support.
- ✓ The project proposal includes an executive summary, an implementation timeline, available resources, required resources, two paid job positions, three volunteer placements, a well researched budget and rules for access to finances, and an institutional background for those new to Grupo Fenix.
- ✓ The document can now act as a starting point, if not template, for future CIPPER funding proposals.

#### **Planned Progress:**

- Register as an official NGO
- Promote small business developments that grow out of initial CIPPER project support.
- Community capacity building, especially of Las Mujeres Solares de Totogalpa, in terms of job skills, renewable energy knowledge and possible business opportunities.
- Continue with REI proposal; either implementing project if funding is accepted or researching other partners if not.

# Continued Support:

Throughout 2007, Grupo Fenix continued to develop and realize renewable energy projects with its long list of partner organizations, businesses, universities and interested individuals. The search for new partners and supporters also yielded some great successes and ongoing relationships. The list of individuals who make the Grupo Fenix and its various programs possible is extremely long and ever-growing, and while our appreciation to these individuals is immeasurable, for the sake of conserving document length a of list every individual simply cannot be included.

#### 1. Noble Fund

- 2006 Financial support for the Noble Solar Production Center.
- 2. Skyheat and Dr. Richard Komp

- United States based NGO for the advancement of Renewable Energies. Dr. Komp has been our chief scientific teacher and advisor, and Skyheat the channel for receiving donations from groups and individuals.

# 2. Falls Brook Centre and the Canadian Government

- Continued support by sending two volunteers through Canadian International Development Association's Youth International Internship Program.
- 1999 Financial start up grant for landmine victims and solar workshop project.

### 3. ADRA

- 14,000 trees for solar mountain; drip irrigation system; fruit trees at Centro Solar.

# 4. Body Shop Inc.

- 2006 Financial support for continued generation of employment opportunities, as well as education and research of solar cookers.

### 5. Estelí City Hall

-Creation of employment opportunities for Las Mujeres Solares de Totogalpa.

### 6. St. Andrew's United Church in Moosejaw, Canada

- Financial support Solar Workshop and Las Mujeres Solares de Totogalpa community projects.

### 7. Solar Energy International (SEI)

- Collaborating with a course as part of their International Education Program.
- Promotion of Grupo Fenix's work.
- Assistance with project proposal writing and search for funding partners.

### 8. Dayton University Group and ETHOS

- Support through course attendants and volunteers. They have helped with solar cooker and photovoltaic research, as well as a solar autoclave.
- 9. Cornell, Berkley, Olin, Ohio State and MIT universities and Engineers for a Sustainable World through Summer Engineering Experience in Development.
  - Research and design support for solar cookers, solar dryers and design changes. Support through long term volunteer placements. Financial support for projects as well.

# 10. PROCESO

- PROCESO has solar cooker organizations in five Central American countries and has existed for at least 18 years. We have been working with them for 10 years and they assisted with our initial solar cooker projects.

# 11. Proleña

- Worked together to promote renewable energy and sustainable practices.

### 12. Municipal Development Committee for Totogalpa

- Municipal planning, project impact reporting, as well as offered advisory support for development programs in Totogalpa.

# **13. FCC War Victims Reconciled and United for Peace/ Winds for Peace**

- Provided Las Mujeres Solares de Totogalpa with leadership workshops, advise on legal matters, and accounting support

# **Individual Donors:**

- Diana Porter and Leonard Webb, Deborah Bruns and David Bunn, Jaime and David Deming, John Webster, and more...

# **Grupo Fenix Advisers:**

- Richard Komp, Catherine Borrowman, Eric Fedus, Deborah Bruns, Uriel Carazo, Jack Parry, Dulce Guillen, Carolina Barretto, Padre Julio Lopez de la Fuente, Nicolas Borgen and many more...

#### Other NGO and Organization Partnerships include:

- FCC War Victims Reconciled and United for Peace, Movimiento Comunal, ASODECOM (Association for Rural Development) and INPRUH (Institute for the Progress of Human Resources).

#### The Grupo Fenix 2007 Staff:

- Susan Kinne, Suyen Cordoba, Adalila Rizo, Isabel Solis, Maxima Medina, Karen Molina, Erika Gonzalez, Marco Perez, Guadalupe Gonzalez, Antolina Ortega, Nimia Lopez, Amanda Baran, Page McClean, and Karen Jespersgaard.

#### Las Mujeres Solares de Totogalpa:

 Nimia Lopez Sanchez, Vidalia Perez R, Adelina Sanchez, Carmen Gomez Lopez, Mayra Azucena Lopez, Maria Antonia Centeno, Guillermina Perez Garcia, Nury Banesa Diaz, Frederlinda Perez Lopez, Rosa Amalia Martinez, Nolberta Diaz, Blanca Azucena Sanchez, Reyna Isabel Lopez Rizo, Hilda Ivania Lopez Rizo, Elia Maria Perez, Elba Amparo Nolasco, Bertha Lopez, Kenia Damaris Perez, Yelba Maria Lopez Laynez, Glenda Isabel Lopez, Antolina Ortega Hernandez, Guadalupe Gonzales Pastran, Maria Alejandra Sanchez, Marbita Gonzalez, Aura Beronica Inestrosa, Rumalda Lopez Lopez, and more to come...

#### 2007 International Volunteers:

- Rod Macintosh, Nathan Curry, Charlotte Ross, Jagan Voora, Leanne Robinson Andrij Fitzsimmons, John McGlynn, Jenny and C.J. Colavito, Adela Pena, Scott, Nadia Siles, Martin Rollecschek, Rupam Singla, Jorge Padilla, Katie Kinsted, Noel Dekking, Julio Angulo Gareta, and Johnathan Janeway.

# Final Note:

The Grupo Fenix staff would like to thank everyone involved with the organization, without whom, all of the positive changes that are being realized in our pursuit for a sustainable Nicaragua would not be possible. A special thanks goes to the community of Sabana Grande, Susan Kinne, Las Mujeres Solares de Totogalpa, Marcos Perez, Richard Komp, all our project support and funding organizations listed above, our wonderful and overworked staff, our incredibly dedicated international volunteers, our partner NGOs, associated universities, independent donors, course participants, and the government of Nicaragua.