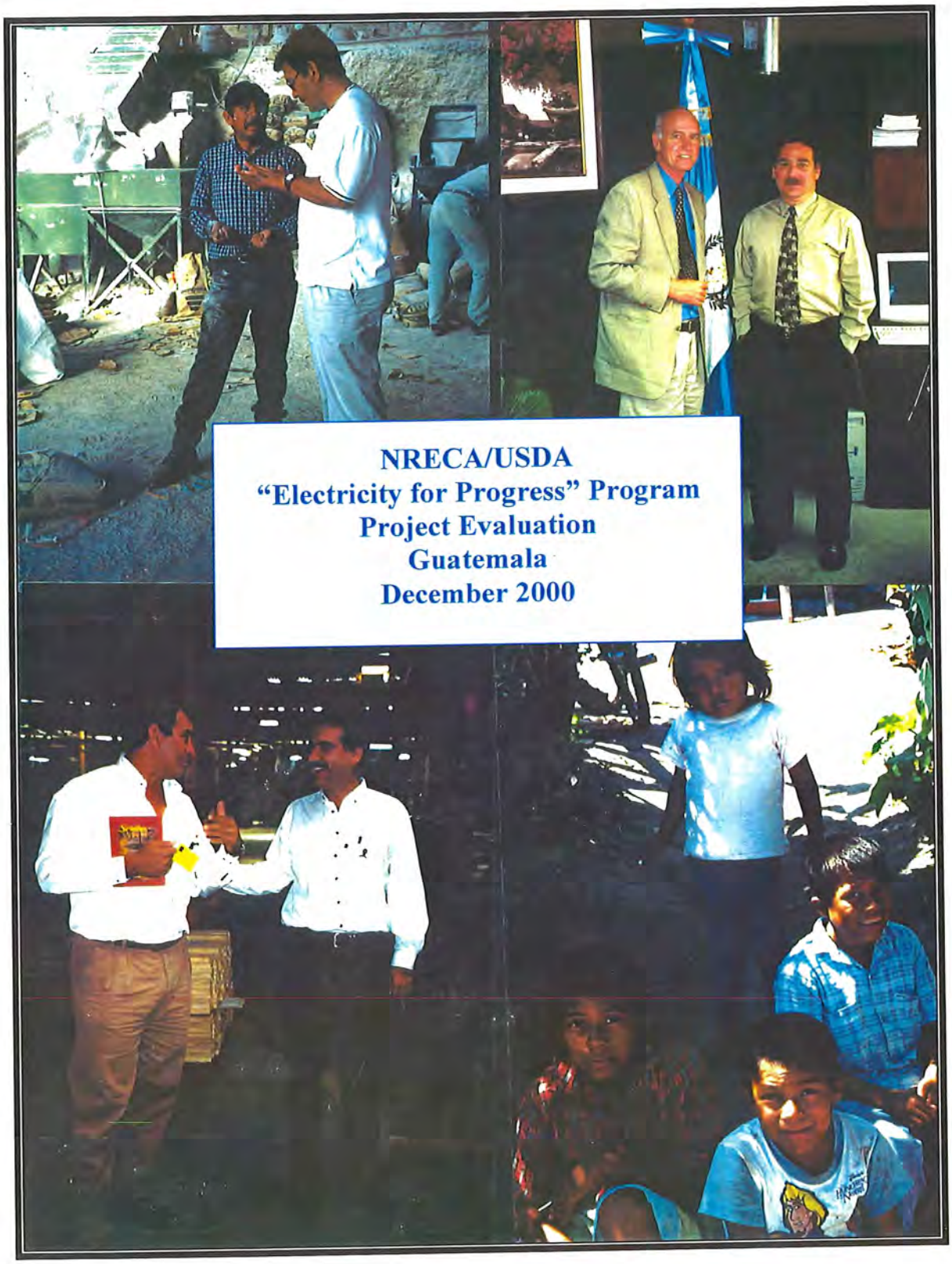

NRECA/USDA
"Electricity for Progress" Program
Project Evaluation
Guatemala
December 2000

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Bringing light and prosperity to the poor, rural children of Guatemala

Victims of Hurricane Mitch

Senior Evaluator
Ted Weihe

Executive Summary

With USDA support of donated surplus commodities, NRECA has successfully implemented a program to help bring light and prosperity to the poor, rural Guatemalans. Families and their micro-enterprises that are in remote agriculture areas now have electricity. They are beginning to enjoy the social, economic and educational benefits that come with electricity. When interviewed, they often say that "A new door has opened in their lives and a new light is shining on their future." This evaluation documents some of the impacts and makes recommendations on how to expand the program's effectiveness.

The Electricity for Progress Project is a joint project of NRECA International Ltd. and the U.S. Department of Agriculture (USDA) for rural electrification in Guatemala. The monetization of surplus wheat commodities results in local currencies that are deposited in a trust fund to finance electricity-related loans for agricultural production, rural development and poverty alleviation. Two shipments of 20,000 metric tons of high protein wheat, one in 1999 and the other in 2000, were provided to seven Guatemalan mills for bread production. Each shipment covers about four months of imports and does not disrupt normal U.S. or domestic commercial markets.

The local proceeds are kept in a separate account jointly administered by NRECA and Banrural and provided as loans on revolving basis. Applications for electricity-related activities are screened based on the plan of operations and technically reviewed for compatibility with project purposes. Counterpart contributions and guarantees are required for each project. NRECA provides technical assistance on a fee-basis for construction specifications and then assists applicants for contracting the work with local firms. NRECA monitors the construction to make sure that it meets specifications.

During November 2000 the evaluator visited four project sites:

(1) Solar home lighting for remote fishing villages of Manabique and Quetzalito
(2) Electrical upgrade, equipment and energy efficiency project for the Maderas de Milpas Altas, a furniture manufacturer
(3) Three-phase grid extension to a wastewater treatment plant in the Fraijanes municipality
(4) Electrical upgrade for an expanded calcium processing plant

Each project fully met the criteria in the operational plan: agricultural development, significant counterpart contributions, accessing power from grid or isolated systems (solar) and strong local leadership. Through improved electricity, the projects assist agricultural development in the following ways:

- The furniture manufacturing company will expand its production and export of quality wood products and increase efficiency by at least 10%.

- A municipal wastewater treatment plant will provide clean water for irrigation.

- A private-owned crushing plant will more than double its production of limestone as important inputs for melon and coffee production, fertilizer, and chicken production.

The projects also achieve environmental improvements:

- The furniture factory will achieve major energy savings and improved working conditions through a raised roof with better ventilation and lighting,

- The waste treatment plant will end the overflow of sewage from home septic tanks with public health benefits from reduced stream pollution.

The projects also improve the lives of Guatemalans through better living and working conditions (solar lighting for homes and improved working areas), increased jobs (doubling the number of employees at calcium crushing plant), and improved health and economic development (sewage treatment plant).

The evaluator met with millers and Banrural, who are partners in the project. The millers were pleased with the quality of wheat that is blended to make bread and sweet rolls, and indicated a willingness to increase their participation to 30,000 metric tons annual donation of U.S. wheat. Banrural administers the trust fund, carries out credit checks and is the depository bank for loans. The General Manager of Banrural wants to greatly expand the trust fund with a particular focus on isolated, off grid power for agricultural production (coffee bean and herb drying) for remote villages.

The evaluator offers the following key conclusions:

- The Trust Fund is having major economic and social impacts for rural Guatemalans. Project selection is sound with criteria that focuses on expanded productive activities of enterprises, line extensions from municipal distribution systems and off-grid, alternative power such as solar electricity to remote villages.

- The trust fund substantially leverages funds from private entrepreneurs, municipalities and local participants (counterpart funds). The trust fund operates at near market rates. Banrural closely screens all applicants for creditworthiness and requires guarantees (co-signers for loans). Banrural has proven to be a strong partner in the project. The trust fund should be enlarged with additional resources to fill the gap in the current Guatemalan efforts to provide electricity to 800,000 villagers.

- Since Guatemala is the Central American model, NRECA should prepare an analysis of the energy privatization process, its gaps and impact on rural electrification to share with other countries and organizations in the region.

NRECA/USDA "Electricity for Progress" Program

Surplus Farm Commodities

U.S. Farmers
Surplus Commodities

Sells

USDA Commodity Credit Cooperation/USDA Foreign Agriculture Service Grants

Grants

NRECA Sells Commodities Commercial Vendors/Millers

Sells

Commercial Vendors/Millers Sell to Domestic Retailers/Public

Local Currency Deposits to NRECA Rural Electricity Trust Fund

Loans

Rural Electrification Projects

Solar Units | Grid Extensions | Systems Upgrades

Repays

Deposit Reflows to NRECA Rural Electricity Trust Fund to Finance More Projects

Grid Extension to Power Waste Treatment Plant

System Upgrade to Power Motors for Rock Crushing

Solar Units for Villages/ Schools Lights

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I. Project Methodology

The Electricity for Progress Project is a joint project of NRECA International Ltd. and the U.S. Department of Agriculture (USDA) to expand rural electrification in Guatemala through the monetization of surplus wheat commodities. The Food for Progress program operates through a trust fund that supports electricity-related loans for agricultural production, rural development and poverty alleviation in Guatemala. Two shipments of 20,000 metric tons of high protein, hard winter wheat were provided to seven Guatemalan mills for bread production, one each in 1999 and 2000. Each shipment covers about four months of imports and does not disrupt normal U.S. commercial markets (Refer to attachment 1 for more information on monetization).

The local proceeds from the donated commodities are transferred when the vessel leaves the U.S. port and placed into a separate NRECA account. The millers truck the wheat from the Guatemalan port to their warehouses for blending with other grains for bread production. The funds are placed in a trust fund jointly managed by NRECA and Banrural. The fund operates on a revolving basis at near market rates of interest. Applications for electric activities are screened and technically reviewed for compatibility with project purposes. Counterpart contributions are required for each project and Banrural reviews the applicants' credit worthiness. Loan guarantees are required from co-signers or from municipalities in the case of community grid extension (See attachment 2 for project implementation process).

NRECA provides technical assistance on a fee-basis for construction specifications and then assists applicants for contracting the work with local firms. NRECA monitors the construction to make sure that it meets specifications.

Out of the 26 applications, the project has completed two projects, approved five for implementation, is reviewing 12, and has rejected five. These projects break down as 12 for grid extension, 12 for power upgrades and energy efficiency and 2 for village solar (See attachment 3 for project details).

The evaluator visited the following four project sites:

(1) Solar home lighting for remote fishing villages of Manabique and Quetzalito.

(2) Electrical upgrade and energy efficiency project for the Maderas de Milpas Altas, a furniture manufacturer.

(3) Three-phase grid extension to a wastewater treatment plant for the Fraijanes municipality.

(4) Electrical upgrade for a private calcium-processing plant.

In addition, the evaluator visited two villages where refugees from Hurricane Mitch have been resettled and will be electrified with grid extensions from complementary USAID funds.

Each of the visited projects fully met the criteria in the operational plan: agricultural development, significant counterpart contributions, accessing power from grid or isolated

systems (solar) and strong local leadership. All of the projects represent major impacts on the lives of rural Guatemalans including improved quality of life, increased production and job creation. Specifically, the projects contribute to agricultural development:

- Village solar lighting improved the lives of fisherman, extending their working hours.
- The furniture company will expand its operations, purchase better equipment and increase production by 10%.
- The municipal wastewater treatment plant will provide clean water for irrigation.
- The calcium-processing crushing plant will more than double its production as critical inputs for melon and coffee production as well as chicken production.

The projects also achieve environmental improvements:

- The furniture factory will achieve major energy savings by lowering its electric bill by 25%. It will also improve its working conditions and reduce electricity consumption by raising roof with better ventilation and including translucent roof panels for natural lighting. In addition, the plant only uses certified lumber from the Forest Service.
- The wastewater treatment plant will end the overflow of sewage from septic tanks that pollute streams and achieved major public health benefits.
- Non-polluting energy provides home lighting to villages next to a national wildlife preserve.

The projects improve the lives of Guatemalans through better living conditions (solar lighting for homes and work areas), increased jobs (increased from 15 to 30 employees for calcium-crushing plant), and improved health and economic development (sewage treatment plant).

The evaluator also met with millers and Banrural who are partners in the project. The millers were pleased with the quality of wheat that is blended to make bread and sweat rolls. They indicated a willingness to increase their participation to 30,000 metric tons of donated U.S. wheat.

Banrural strongly supports the program, administers the trust fund, carries out credit evaluations of applicants and adequate guarantees and is the depository bank for loans. The General Manager of Banrural wants to greatly expand the trust fund with a particular focus on isolated, off grid power for agricultural micro-enterprises (coffee bean and herb drying) for remote villages.

In a meeting with the Minister of Energy and Mining, Raul Castaneda, he indicated that there is a potential partnership of the NRECA-USDA Trust Fund. The Fund could help support independent municipal distribution system with upgrades, loss reduction efforts and extension to peri-urban areas; the creation of consumer-owned distribution systems in

remote, less profitable regions near the Mexican border, and increased productive uses of electricity in rural areas.

II. Project Impacts

Calcium Crushing Plant

The Pulberizadora El Terreadero is a privately owned calcium crushing plant that produces calcium for soil improvement for melon and coffee, chicken production and cement for ceramic floors. The plant currently has 15 full time employees with a capacity of 500 100-lb bags per day from a 32 horsepower crusher. The plant owner is Otto Bran Veliz.

A 80-horsepower crusher made by Universal Crusher Company of Cedar Rapids.

The project will install a new, higher voltage line and three transformers that will increase power by a factor of five. A second, larger parallel crushing operation will increase employees from 15 to 30 and produce 2,500 100-lb bags per day. The additional crusher will produce phosphate for fertilizer. The 80 horsepower $15,000 crusher is made by Universal Crusher Company of Cedar Rapids; transformers are also U.S. built. The project will provide a loan of $14,000 (22 % of costs) with the owner constructing an improved building for the service drop and internal wiring. The new production line will reduce technical losses by about five percent. The plant fully meets all environmental standards and avoids the traditional method of "cooking rocks" in which old tires are burned and water splashed on them to "explode" the rocks.

While most plants in the area are for lime production, this crushing plant represents a new industry that is likely to expand. Rocks are about 99.5 % calcium, which was discovered when cows licked the stones. The project was identified through NRECA partner, Rotary International which provided the economic analysis and market assessment. NRECA designed the power system (100 kVA transformers, 280 meters of line).

Solar Home Systems in Manabique and Quetzalito

Manabique and Quetzalito are two very remote fishing villages on a peninsula surrounded by the Refugio de Vida Silvestre, a wildlife nature preserve. The villages can only be reached from Port Barrios by boat. The project provided 43 solar home units, each of which consists of a photovoltaic panel, pole, regulator, battery and three lamps per house. In addition to lighting, there is sufficient power for a television and a radio that most villagers now own. Homes were self-constructed either with sand floors or on stilts.


Guatemalan communities along the Caribbean coastline.

The project costs about $30,000 (34 % of total) in which each family contributed about $130, the Ministry of Energy provided a grant of $13,000 and the municipality, a loan of $10,000. The installation of solar electricity replaced candles—with a flip of a switch comes a leap into the 21st century.

The villagers indicated that the lighting resulted in a feeling of greater security "just like the city," extended hours for socializing, their children can study in the evenings and it allowed for later meals. The fishermen can also repair nets at night. Electric lights enhance a small rustic hotel and improve its services. The villagers were all trained in using the system including a photo chart by each battery of "dos and don'ts". Solar power is nonpolluting to this natural reserve area with rare species of plants and wildlife.

The project strengthened the Association of Fisherman and linked them closer with the municipality. They are asking the newly elected mayor for assistance in obtaining improved nets to meet conservation requirements and for a deep water well with an electric pump. They also need new roofing since they cannot use traditional thatch since they are not permitted to cut down the mature trees in the reserve.

Energy Efficiency for Furniture Manufacturing Plant

The largest project involves a major power system upgrading and the raising of the plant's roof for better ventilation, clear roof panels for energy, and improved working conditions at the Maderar Milpas Altas factory. The plant produces high quality furniture (e.g., armors, mantles, tables, chests and dressers) for export to the U.S. (290 containers a year). With 400 employees, the factory produces furniture from raw wood to finished product with annual revenues of about $5 million.

The project will provide upgraded transformers, translucent and raised roof, more efficient equipment (saws, sander, planer) and internal wiring at a cost of $135,000. The project will result in major energy savings of about 25 %. The current monthly bill is about $15,000 and is substantially higher because of peak power requirements that will be reduced with more efficient transformers and design. It will improve the plant working areas through reducing water leaks and providing better layout, ventilation and lighting. It is expected to improve production efficiency by 7 to 10 % and reduce overtime and mistakes (poor cuts, finishing) by 10 %. The plant uses only certified wood by the Forest Service (from managed forests), produces furniture from rubber trees (fast growing trees that are usually scrapped for fuel) and has won many environmental awards.

Placing translucent panels in the roof will reduce electricity demand.

Line extension for Municipal Sewage Treatment Plant

The initial NRECA-USDA project provided a three-phase line extension for a wastewater treatment plant for the municipality of Fraijanes. The line cost of about $29,000 (12 % of total project cost, including treatment plant) for six kilometers of line, three transformers, 60 poles and a service drop for a new wastewater treatment plant built by the U.S. firm of Wallace & Tiernan from New Jersey. The municipality paid for the plant, land and site preparation through a combination of federal and local funding sources. Homes in the town will pay for hook up charges and monthly operations. NRECA provided technical support for the line extension. The plant's capacity is 100,000 gallons, sufficient for 15 years of municipal growth.

The sewage treatment plant in Fraijanes.

The new sewage water treatment plant will have major environmental and health benefits since current septic tanks are inadequate and overflow onto streets. The wastewater was polluting streams and resulted in Dengue Fever for children. Water from the plant will be used for irrigation to grow tomatoes and other vegetables. It will also provide water for the municipal soccer field. Water will be metered at each house that will result in major water conservation.

Other Projects

The program recently approved grid extensions for three coffee farms in Santa Cecilia, Los Angeles and La Providencia. These projects will increase productive capacities through upgrading coffee drying and sorting for improved incomes. The project is about to approve a grid extension for new low income housing in San Pedro, Ayampuc and for the municipality of Santa Maria. In addition, several micro-enterprises are getting together for line extensions for their woodworking and metal operations as well as a line of credit for electricity to an association of cooperatives in Huehuetenango, located in the Peace Zone. Two new villages, where refugees of the floods from Hurricane Mitch have been resettled, were provided with roofs, floors and collective water and sanitation. With separate funds, NRECA will provide grid extension to these 40 or so homes.

III. Rural Electrification and Privatization

Guatemala has sold its electric distribution system to Union FENOSA, a Spanish firm. Under the privatization agreement, FENOSA is obligated to make connections to houses and businesses within 200 meters of the grid, and taps a "privatization fund" for more distant connections that are included in its rate base. However, 14 independent municipal distribution systems remain and off-grid, remote areas are not included in the agreement. The problem with this privatization approach is that FENOSA will make connections when it can use the fund ($650 per connection) and is in no hurry to make nearby connections where costs are higher than potential revenues. There is little incentive for rural electrification, especially in remote areas of Guatemala where 800,000 villagers still do not have power.

The evaluator met with the Minister of Energy and Mines (Ministro de Energia y Minas), Raul Castaneda. The ministry provides regulatory authority but leaves it up to the marketplace for meeting electric needs. The government retains control over power generation (INDE) and is attempting to support continued rural electrification. According to the Minister of Energy and Mining, the government is considering applying the profits from power generation to off grid, rural electrification. The government's strategy is to force the private national utility, Union FENOSA, to do line extensions under its privatization agreement, help municipal systems extend their systems to rural areas and assist in isolated distributed systems such as along the Mexican border. The ministry is open to consumer ownership of distribution systems in remote regions.

There is a potential partnership with the NRECA-USDA Trust Fund to support independent municipal distribution system with upgrades, loss reduction programs and extension to peri-

urban areas; the creation of consumer-owned distribution systems in remote, less profitable regions; and productive uses of electricity in rural areas. This partnership would require a major increase in the trust fund and greater participation by the ministry.

IV. Productive Uses and Micro-enterprises

Banrural is owned by the government and micro-finance institutions (MFIs). It is in the process of becoming a second tier bank to wholesale loans through MFIs. In a meeting with the General Manager, Adolfo Gernando Pena Peerez, he expressed strong support for the NRECA-USDA Trust Fund as a means of helping micro-enterprises with electricity. He said, "Electricity is the key to micro-enterprises in rural areas." In particular, electricity is important for irrigation (replacing diesel pumps with alternative energy sources), small-scale manufacturing (sewing, carpentry) and the processing and drying of coffee and herbs such as cardamom.

NRECA and Banrural – partners in the trust fund – are interested in seeking increased resources from donors, lenders and others to expand their rural electrification program. Banrural manages the fund, determines creditworthiness and obtains guarantees from borrowers. The bank is linked to MFIs that, in turn, can help identify clients who require electricity for productive activities. With its technical know how, NRECA brings its experience in rural electrification, alternative power systems, productive uses, and design and contracting capabilities to such a partnership.

V. Conclusions and Recommendations

1. Electrification projects through the Trust Fund are having major economic and social impacts for rural Guatemalans. Project selection is sound with criteria that focuses on expanded productive activities of enterprises, line extensions from municipal distribution systems and off-grid, alternative power such as solar electricity to remote villages. Additional opportunities exist to expand projects to include electricity to micro-enterprises in remote area such as drying and processing of coffee and cardamom.

2. The monetization process from the point when quality, surplus wheat was shipped to the point it was delivered to seven Guatemalan mills for producing bread worked well. Local currencies are deposited in a local bank and transferred to Banrural that jointly manages the trust fund with NRECA. Two shipments of 10,000 metric tons of hard winter wheat (high in protein necessary for bread production) were provided each in 1999 and 2000. The monetization of wheat can be increased to 30,000 metric tons annually without any disruption in U.S. or local markets.

3. The trust fund substantially leverages counterpart contributions from private entrepreneurs, municipalities and local participants. The trust fund operates at near market rates (with technical assistance usually provided on a fee basis from NRECA outside of the loan itself). If the technical assistance were included in the loans, it would reach market rates. Banrural closely screens all applicants for creditworthiness and requires guarantees (co-signers for loans). Banrural has proven to be a strong partner in

the project. There was some delay in setting up the trust fund because of due diligence by NRECA.

4. The trust fund should be enlarged with additional resources (including monetization) to fill the gap in the current Guatemalan efforts to provide electricity to 800,000 villagers. Union FENOSO, as a private utility, is unlikely to extend electric lines to areas that are not profitable, especially after the current subsides for line extension (privatization fund) are exhausted. The trust fund can be used for line extensions from the 14 independent municipal distribution systems and to reach more remote areas, especially with off grid, alternative energy system such as a solar, wind and small hydro. Power projects, even for social activities such as home lighting, should be combined with productive uses to increase incomes of rural Guatemalans.

5. NRECA/Guatemala should focus on a major increase in the trust fund through seeking additional funds from USDA monetization programs, INDE power generation profits, municipal governments, cooperatives and micro-enterprises interested in isolated electric productive uses, and other donors. Specifically, NRECA should explore USAID's Direct Credit Authority and IDB's Multilateral Investment Fund as sources of additional funding or guarantees. NRECA should seek commercial bank funding for the trust fund based on its current and possibly additional guarantees.

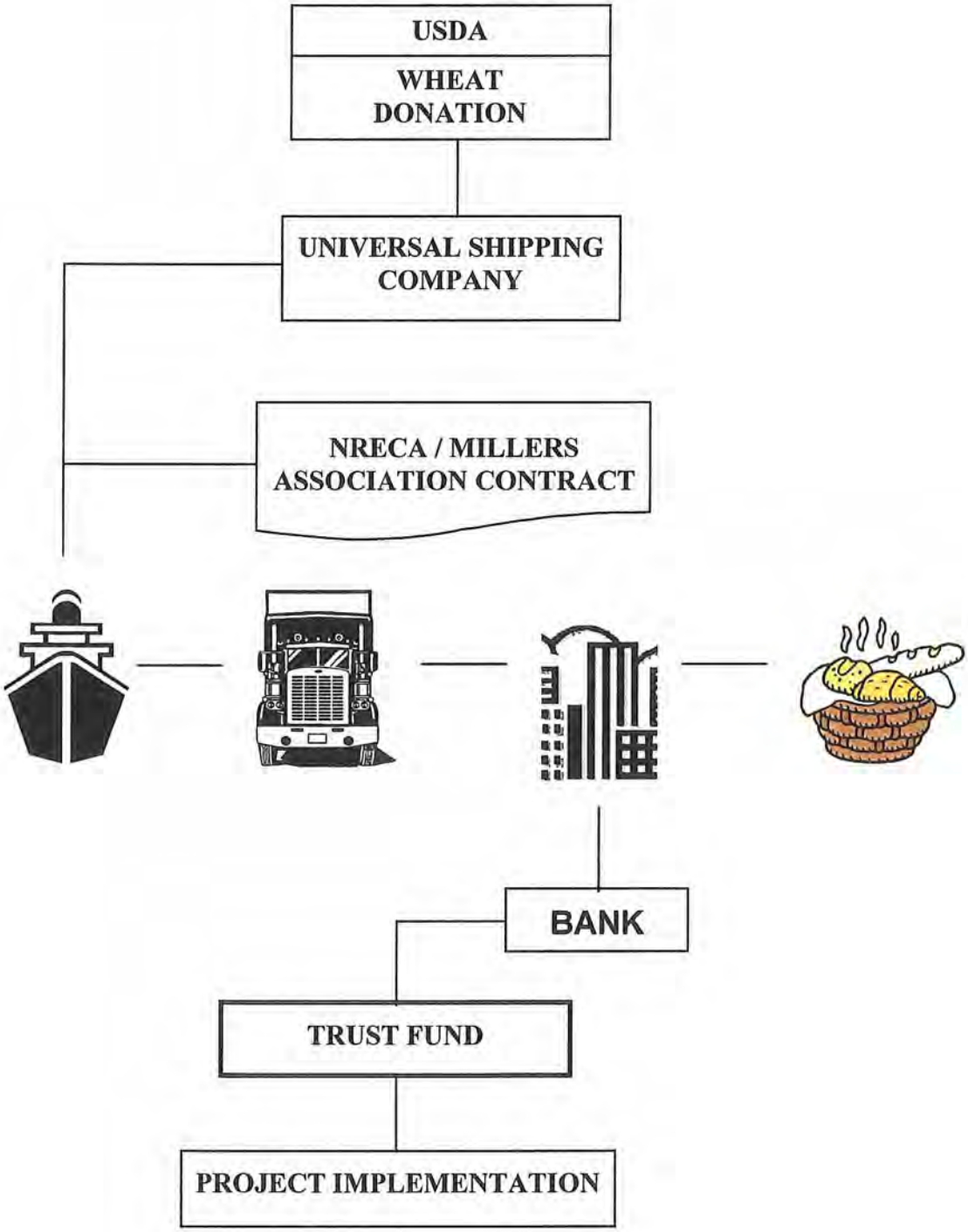
6. NRECA/Guatemala should prepare an analysis of the energy privatization process and its impact on rural electrification. The analysis should make recommendations to the Ministry of Energy and Mining on how to achieve rural electrification under the privatization approach and make recommendations to other governments in the region that are using Guatemala's experience as their blueprint. In particular, lessons learned would be valuable to Honduras as part of a policy dialogue.

7. NRECA/Guatemala should integrate its project activities to better use surplus equipment to strengthen the municipal distribution systems. NRECA should consider carrying out an analysis of these system's equipment needs to match available surplus equipment from U.S. rural electric cooperatives. NRECA Guatemala also should explore obtaining surplus pickup trucks and "monetize" them as a strategy to increase resources in the trust fund. Vehicles could be provided to non-profit organizations including Banrural and other partners at near market rates.

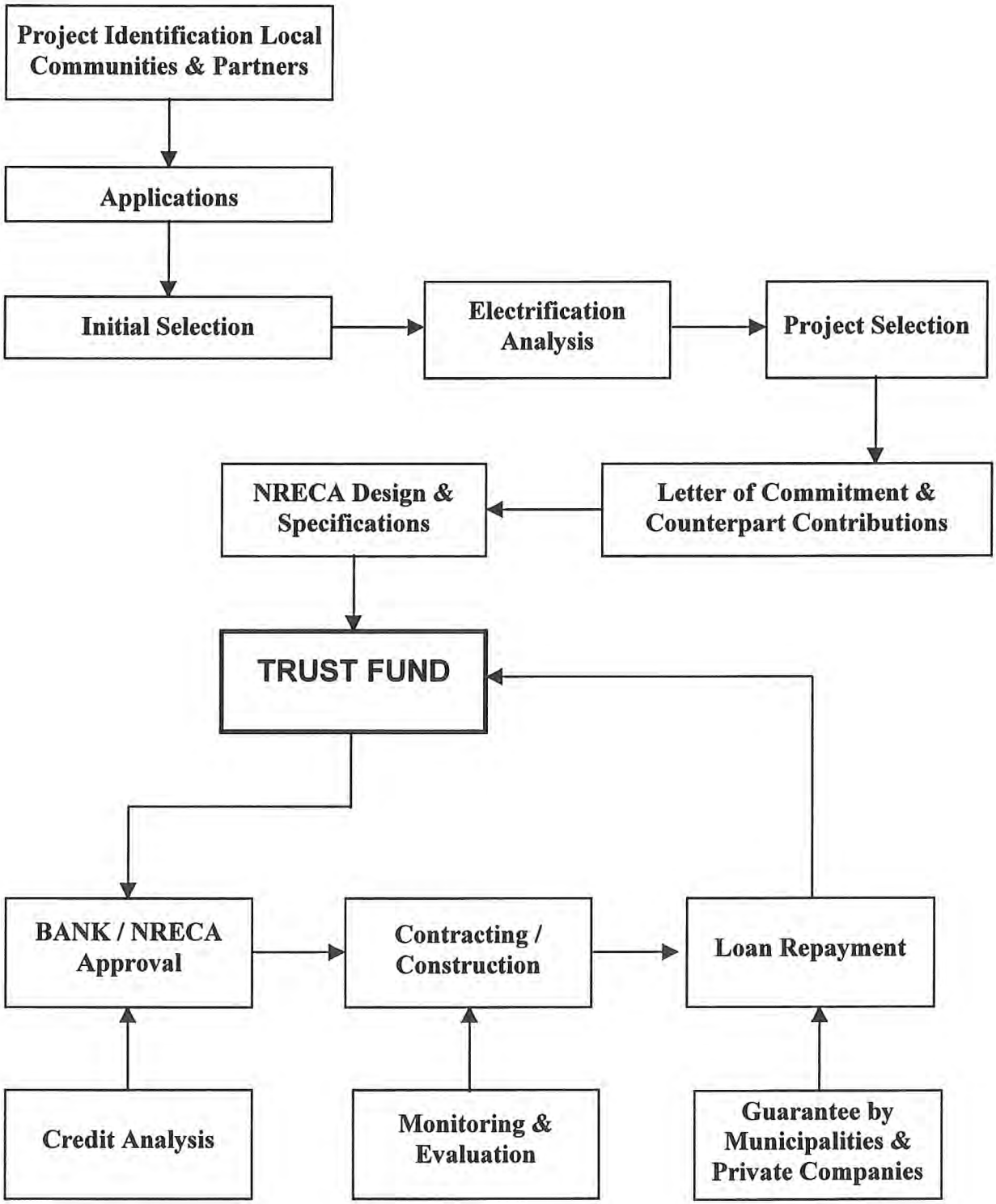
8. NRECA/Guatemala should attempt to create a rural electrification network of partners who are committed to bringing power to unserved villages and enterprises. Partners should include local NGOs, cooperatives, MFIs, development organizations, the Ministry of Energy and Mines, INDE and others.

Attachments

1. Electricity for Progress Project Monetization



2. Electricity for Progress, Project Implementation



3. Electricity for Progress, Projects in Guatemala

ID	Category	Name	Location	Responsible	Amount Required (Q)	Total Project Cost (Q)	Percent of Total	Beneficiaries	Status
1	PUE	Three-Phase Grid Extension for Water Treatment Project	Fraijanes, Guatemala	Marco Tulio Meda, Municipal Major	361,935	2,950,000	12%	28,000	Approved by BANRURAL, the project is in the execution phase. The project was authorized on February 2000.
2	SOLAR	Solar Home Systems in the villages: Manabique and Quetzalito	Puerto Barrios, Izabal	Mario Chigua, Municipal Major	82,800	240,800	34%	43	Approved by BANRURAL, the projecto has been executed. The project was authorized on August, 2000.
3	GRID	Grid Extension for Village Juan Pablo II Community	Zacapa, Zacapa	Carlos Pineda	77,000	110,000	70%	66	This project is now part of the RREICA portfolio projects.
4	SOLAR	Solar Home Systems in the village Nueva Esperanza	Ixcan, Quiché	Bonifacio Francisco Cuá	96,000	216,000	44%	36	Pending the other contribution
5	GRID	Grid Extension for Three Rural Villages	Fraijanes, Guatemala	Marco Tulio Meda, Municipal Major	243,360	405,600	60%	77	The work plan draft was delivered to the Municipality for its revision.
6	PUE	Calcium Processing Plant, El Terreadero, Agua Salobrega	Sanarate, El Progreso	Otto Ramiro Brán Véliz, Owner	110,000	500,000	22%	24	Technical design elaborated by NRECA which is preparing the documentation for BANRURAL
7	Grid	Trasnformer Station in Municipal Electric Utility of Jalapa	Jalapa	Mervin Sánchez		700,000	0%	8,000	The Municipality bought the transformer from another company that gave it a better price.
8	Grid	Tri-Phase Grid Extension for the Coffee Mill San Antonio / Anexo	Villa Canales, Guatemala	José Luis Del Cid, Owner	240,000			35	The Work Plan has not been completed; the business plan draft is ready for revision.
9	PUE	Energy Efficiency Project for Wood Processing Plant, Maderas de Milpas Altas	Santa Lucia Milpas Altas, Sacatepequez	Haroldo Montenegro, Manager	1,000,000			400	Collateral is still pending to be confirmed. Pending final approval.
10	PUE	Water Pumping System for Intensive Agriculture in Agro Dos Valles	Río Hondo, Zacapa	Hernan Roldan, Owner	150,000	300,000	50%	200	Waiting for the approval of the business plan by the client
11	PUE	Water Pumping System for Intensive Agriculture San José	Teculután, Zacapa	Hernan Roldán, Owner	150,000	300,000	50%	200	The client found a better credit plan.
12	Grid	Sincronization Project in Hydroelectric owned by Municipal Electric Utility of Retalhuleu	Retalhuleu	Municipal Electric Utility	-	-		4,800	The client has not presented the credit request form; the project profile has not been created by NRECA.
13	PUE	Municipal Pumping System	San Jose Nacahuil	Eduardo Avalos Figueroa, Municipal Major	168,000	324,535	52%	12,000	The work plan in draft was elaborated, pending the project profile elaboration.
14	PUE	Wood Industry WorkShop	Cubulco, Baja Verapaz	Juan De La Cruz	36,687	51,012	72%	6	Rejected because it has not applied for credit. It is possible that they get together with the project No. 15 to make a better project profile.
15	PUE	Metal Workshop	Cubulco, Baja Verapaz	Juan De La Cruz	27,263	41,213	66%	6	Rejected because it has not applied for credit. It is possible that they get together with the project No. 14 to make a better project profile.
16	PUE	Municipal Pumping System for Village Chijax	Chimasat, Chimaltenango	Raymundo Juárez, Municipal Major	342,224	570,373	60%	33	Documents have to be completed by the authorities also pending business plan.
17	PUE	Coffee Mill La Nueva Esperanza of Xibalbá	Cubulco, Baja Verapaz	Emilio Santos	45,000	75,000	60%	60	Documents have to be completed by the owners also pending business plan

* Conversion rate: US$1 = Q 8 (Q = Guatemalan Quetzales)

18	PUE	Water Pumping in Village of Chillani	San Pedro Sacatepequez, Guatemala	Edgar Ajcip, Municipal Major		-		400	Waiting an answer from the authorities
19	PUE	Municipal Pumping System for San Pedro Sacatepequez	San Pedro Sacatepequez, Guatemala	Edgar Ajcip, Municipal Major	300,000	-		0	Waiting an answer from the authorities
20	GRID	Three-Phase Grid Extension and Bank of Transformer for Coffee Farm Santa Cecilia	San Pedro Necta, Huehuetenango	Mariano Castillo Herrera, Owner	164,219	-		120	Completing the final details.
21	GRID	Three-Phase Grid Extension and Bank of Transformer for Coffee Farm Los Angeles	San Pedro Necta, Huehuetenango	Ana María Ortega Villatoro, Owner	73,901	-		130	Completing the final details.
22	GRID	Three-Phase Grid Extension and Bank of Transformer for Coffee Farm La Providencia	San Pedro Necta, Huehuetenango	Virginia Del Tránsito Pinto Aguirre, Owner	164,220	-		150	Completing the final details.
23	PUE	Metal and Wood Shops in San Juan Ixcoy	San Juan Ixcoy, Huehuetenango	Andrés Tercero Bautista	155,340	235,340	66%	12	Completing the final details.
24	GRID	Grid Extension for New Housing Project for Low Income Families	San Pedro Ayampuc, Guatemala	Walter Osvaldo Marroquín Quintana, Manager MARBOLE,	60%	40%		900	Pending approval by the internal committee and by NRECA / USA.
25	PUE	Umbrella Credit for Small Coffee Growers with ASDECOHUE	Huehuetenango	Daniel Palacios				2,000	Pending definition of the program and approvals
26	GRID	Grid extension as part of the Municipal Rural Electrification Plan	Santa Maria Cahabón, Alga Verapaz	Mariano Caal Choc, Municipal Major	2,100,000	3,790,267	55%	923	Pending final coordination and agreement for technical assistance contract.

4. Evaluator's Resume

Currently, Ted Weihe is Executive Director of the U.S. Overseas Cooperative Development Council which consists of eight national cooperative organizations engaged in over 75 long-term projects in some 60 countries with over $155 million in annual revenues. He is also a consultant and evaluator for these organizations.

He has initiated over 30 successful development projects worldwide, totally some $100 million, including telephone cooperatives in Poland, alternative micro-finance for small businesses and NGOs in Romania, dairy associations in Albania, Bulgaria, Montenegro and Poland, Farmer-to-Farmer volunteer programs worldwide, and cooperative development in the West Bank. He initiated Participa, one of the most successful grassroots democracy programs in Chile that was instrumental in its return to democracy.

He has prepared over 30 evaluations, conducted strategic planning workshops and published numerous articles including for the Christian Science Monitor and the Washingtonian. He was a contributing author to Promoting Democracy: Opportunities and Issues (Praeger, 1988).

Currently, he serves on the USAID Advisory Committee on Voluntary Foreign Aid and led its partnership efforts to revise its Strategic Plan. Mostly recently, he gained passage of the Overseas Cooperative Development Bill that expands USAID's mandate to promote all types of cooperatives overseas. He founded the Campaign to Preserve U.S. Global Leadership, composed of over 300 companies, NGOs and the U.S. Chamber of Commerce, that has reversed the decline and helped increase the 150 International Affairs Account by over $2 billion.

He serves on the executive committee of the Cooperative Development Foundation and chairs its United Cooperative Appeal which last year raised $100,000 for domestic and international cooperative development. Prior to his current position, he was coordinator of USAID's cooperative development programs and worked in USAID's Bureau of Legislative Affairs. He led public policy efforts for the National League of Women Voters in international and environmental issues including co-chair of the National Clean Air Coalition and organizer of a broad-based coalition of NGOs for foreign assistance reform. He headed a regional citizen group involved with urban growth issues. He has been a Hill reporter for a trade association and a Captain in the U.S. Air Force.

He is active in numerous Arlington civic organizations including serving as chairman of the Neighborhood Conservation Program and the Committee of 100 as well as president of the Yorktown Civic Association.

He holds a B.S. in Foreign Service from Georgetown University and a Masters in Environmental Planning from the University of Virginia