

2002

# Annual Report



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Chris Shimkin

To Our Friends and Supporters,

As powerful as any one country, organization, or person may feel, we all need each other to succeed. Equally so, each individual mission that succeeds is supported by the success of another. Engineering is a vital component and often the hidden backbone of many successful projects whether medical, agricultural, micro-enterprise, or rural development. Over this past year, the volunteers of Global Village Engineers have provided enormous support toward the success of GVE's mission and that of other organizations and their projects.

The service provided by GVE is being recognized by more NGOs and government agencies as a vital link to address the issues of rural poverty. It is too expensive for even the largest NGOs to maintain a staff of engineering talent; therefore, GVE comes as a welcome and necessary member of their organizations.

Articles in industry publications and GVE's quarterly newsletter (News & Notes) reinforce GVE's success. With this publicity, the engineering community is recognizing that GVE provides an engaging opportunity for corporate philanthropy.

On 2002, GVE provided volunteer services to three times the number of communities than just one year ago. This increase is attributed directly to the generosity of corporations, private donors, and volunteers. But there is still so much more to do. In the coming year, Global Village Engineers will continue to expand its reach to areas where the disadvantaged are working to improve their communities.

Sincerely,

*Christopher Shimkin*

Founder, Executive Director

# About Us



## About Global Village Engineers

Global Village Engineers is a corps of volunteer civil and environmental engineers helping communities in developing countries understand how infrastructure projects are planned, constructed, and maintained.

Communities often have the greatest stake in the success of infrastructure but lack access to qualified, independent technical consultants to help them understand such projects. Building on their intuitive knowledge and discovering new facts with GVE volunteers, communities are empowered with knowledge. With this knowledge comes the self-assurance and confidence allowing people to cooperate in the planning and maintenance of infrastructure, thus reducing the likelihood it will fail due to misunderstanding and neglect.

Successful infrastructure improves the quality of life for all while respecting the existing environment. Governments and international agencies that fund successful infrastructure can invest more money in new projects rather than rebuilding or replacing failed ones. Equally important, communities are more likely to enjoy cleaner air, safe drinking water and less severe damage due to natural disasters.



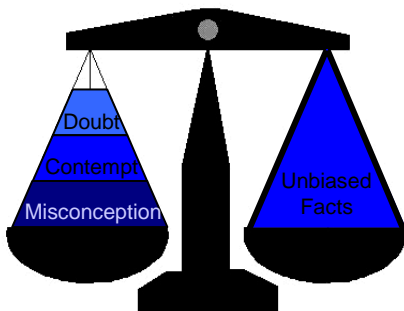
## What is infrastructure?

Infrastructure is “a framework or foundation that supports a system.” Roads, bridges, water supply, irrigation, flood control, wastewater treatment, and landfills are just a few examples of infrastructure, the framework that supports neighborhoods and communities.

## How is infrastructure important?

Infrastructure, in good working order, often goes unnoticed while accomplishing vital things we take for granted:

- **Preventing floods.** Levees prevent a river from overtopping its banks and flooding inhabited areas.
- **Supplying Water.** Clean, reliable drinking water is needed by all. Hospitals need water to provide a clean, sanitary place for sick patients to heal. For their crops, farmers need water free of contaminants.
- **Safe transportation.** With safe, reliable roads, police cars and ambulances can provide reliable emergency services. School buses use roads and bridges to safely transport children to and from school.
- **Providing electricity.** Hydropower plants generate electricity, which power the televisions and computers people rely on for global news and communication.



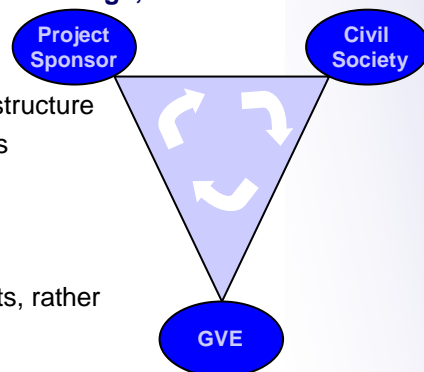
### Global Village Engineers and Infrastructure

Civil and environmental engineers are experts in the design, construction, and maintenance of infrastructure. Working with GVE, communities build on their existing intuition to understand technical facts and dispel the myths and rumors that often accompany large infrastructure projects.

Project Sponsors, including multilateral agencies, governments, and corporations are investing billions of dollars in infrastructure in developing countries. **When people are empowered with knowledge, infrastructure is more likely to succeed.**

✓ Communities, when they understand the purpose of infrastructure before it is constructed, can communicate ideas that projects sponsors need to plan infrastructure that complements local needs and resources

✓ Project sponsors, in turn, can invest money in new projects, rather than invest more money to rebuild or replace failed projects.





# Annual Highlights

*In 2002, volunteers donated over 1,600 hours of vacation time and personal time to work on projects with Global Village Engineers. Volunteers worked directly with NGOs and communities as well as raised awareness within the engineering community.*

## Workshops

In GVE workshops, people have a neutral, unbiased opportunity to learn technical facts as well as the potential benefits and challenges of infrastructure projects. GVE's workshops incorporate open discussion forums and field trips that help participants build on their intuitive knowledge as learn the technical facts supporting their intuitive thoughts.

## One on One Advising

GVE supports micro-enterprise projects by providing technical advice for free or a very reduced price. Agricultural engineering and water supply engineering are two areas of expertise that small businesses can readily use to improve their operations.

## Raising Awareness

An important component of community and social development work is raising awareness about infrastructure. GVE, working with NGO's, help people understand that lobbying for the infrastructure is only the beginning. Maintaining infrastructure, that next step, is a community responsibility that is critical to ensuring infrastructure provides long-lasting benefits.

## Partners

GVE is an approved vendor of the **World Bank Group**.

GVE is an affiliate of and deployed volunteers from the World Economic Forum Disaster Resource Network.

GVE signed a memorandum of understanding with **CARE-USA** providing opportunities for volunteers to work on CARE projects throughout the world.

Throughout 2002, GVE continued to work successfully with our existing partners: Voices on the Border, SHARE Foundation, CENZONTLE, Oxfam-America, InterAction, International Finance Corporation, and Sierra Gorda.

## Publications

Oxfam-America and the World Economic Forum each recognized the unique efforts of Global Village Engineers in feature articles.



*Relationships are vital to GVE's success. Much of the coming year will be devoted to enriching our existing relationships and developing new ones with NGOs and communities in need of technical support. As well, GVE plans to streamline the volunteer corps to include only the most committed and active engineers. Activities and accomplishment will be described in [GVE News & Notes](#), the quarterly newsletter for friends and supporters of Global Village Engineers.*

Engaging participation through community workshops will continue to be the hallmark of GVE's technical support. In El Salvador, new workshops will be designed to train people in basic levee repair. As well, GVE plans to develop workshops and school programs specifically for children, to raise their awareness about infrastructure and its role in the community.

To maintain strong relationships with communities, GVE must build and maintain strong relationships with its volunteers. In early 2003, GVE will trim its volunteers corps to include only those people actively committed to the ideals and projects. In return for their volunteer service, GVE will help volunteers acquire continuing education and professional certificate credits from established engineering organizations.

In many Salvadoran communities, women are solely responsible for providing clean water and proper sanitation in their homes. In 2003, GVE will make strides to actively develop programs for women, by women engineers, to provide technical support that enhances existing water and sanitation programs used predominately by women.

In Africa, large-scale infrastructure projects are at the forefront many new development initiatives. Global social development organizations already working with GVE elsewhere are reporting projects and activities where GVE's technical support would be welcomed.

For the purpose of projects and volunteer development, GVE will look to establish or expand on existing partnerships with the World Economic Forum, Habitat for Humanity, Doctors of the World, Engineers without Borders, Institute of Practicing Environmental Professionals, and CRIPDES.

The world's businesses are affected by globalization and the engineering industry is no exception. GVE provides engineering firms a unique opportunity to have an active role in philanthropy with a global focus. GVE will establish at least five new engineering firms as official sponsors of Global Village Engineers.

# Looking to the Future

## Workshops

## Volunteers

## Women Leaders

## Geographic Expansion

## New Partners

## Industry Support

# Helping Communities Lead the Effort for Water Rights

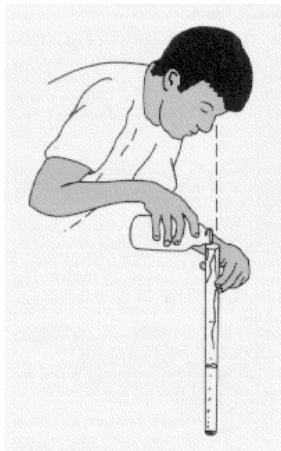
## Global Village Engineers in Cambodia

### ***Strung Treng and Ratanikiri*** ***January 2002***

Oxfam-America contacted GVE on behalf of Sesan River communities. GVE provided the technical expertise needed to develop a simple river water quality monitoring plan, one that the communities could implement easily without sacrificing much time away from work or home. A local NGO continues to help mobilize and motivate the communities implementing the study. ■

### ***March 2002***

Global Village Engineers, working directly with Oxfam-America, developed an instruction manual for communities learning to use the specialized equipment required as part of the water quality monitoring plan.



Community volunteers in Cambodia rely on this instruction guide to carry out various tasks in the water quality study. ■

*"It is rare to encounter a group so capable of working professionally among such a varied audience; especially with a complex topic such as engineering. Yet, their approach opened my eyes to the importance of engineering and how it can unseemingly affect our daily lives. Global Village Engineers has a unique talent in their ability and desire to discover the intuitive knowledge of the poor and marginalized sectors of society and allow them the tools for full participation in projects that concern communities the most."*

Regional Director  
Oxfam-America  
East Asia Regional Office

### ***Oung Dong*** ***May 2002***

In Cambodia, water treatment and supply systems are often installed and maintained by small, private companies. One such company, Tith Water Supply, has successfully built a responsible business installing and maintaining water treatment plant to communities and factories.

As part of a small business support program, GVE was invited to work with Tith engineers. With straightforward, useful technical advice provided by GVE, Tith engineers were able to quickly improve operations at two of its water treatment plants.



Since then, GVE has maintained a close correspondence with Tith as it develops improved water supply systems. Global Village Engineers will continue provide volunteer technical advisors that help Tith's engineers develop more sophisticated technical skills. ■



# Raising Awareness: How Engineering Impacts Communities

## Global Village Engineers in Central America

### *Nicaragua* *March 2002*

Dipilto, a town in Nueva Segovia, Nicaragua, had a variety of small infrastructure needs, ranging from repairing water supply systems, fixing drainage ditches, and rebuilding bridges. Faced with so many projects, the local government wanted to fix as much as possible while giving priority the most critical projects. But what are those most critical projects? The local government, supported by a new mayor, wanted help prioritizing the projects by cost and necessity so that they could get the most "bang for their buck."

In June 2001, GVE traveled to Dipilto, met the mayor and her technical staff, and worked with them to prepare a prioritized list of infrastructure repairs. In March 2002, GVE returned to present the report to communities in a series of public workshops.

This assistance helped the town government get a clear sense of where to begin its infrastructure repair program as well as how to plan for future infrastructure needs. ■



### *El Salvador* *June 2002*

Since 2000, GVE has assisted a group of 27 communities understand the planning, construction, and maintenance needs of an earthen levee along the banks of the Lempa River. The levee extends a total length of 33 kilometers (20 miles).

At public workshops conducted by GVE, communities had the opportunity to learn appropriate and specific maintenance techniques, such as how to create and use inspection forms, and how to take photographs that clearly document conditions before and after repairs.

With GVE's technical assistance, the communities successfully applied for and received grants to buy the necessary supplies to implement the inspection program. ■



# Helping Advocates Use Technical Information Effectively

Global Village Engineers in Mexico

## Queretaro

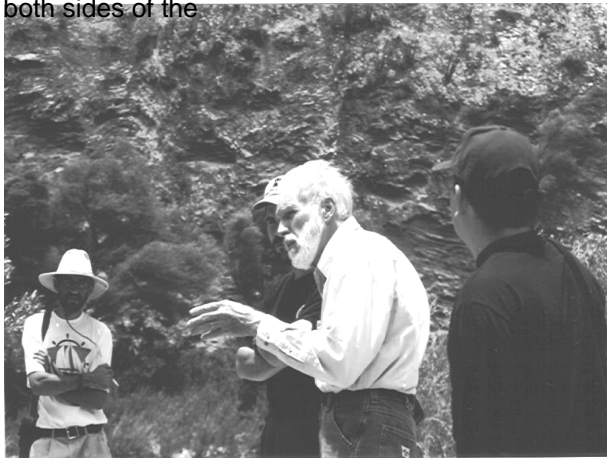
June 2002

Grupo Ecológico Sierra Gorda (GESG), based in Queretaro, Mexico, is an organization that seeks international alliances and partnerships to restore and preserve natural resources in a sustainable way.

*"...we appreciated [GVEs] broad experience and knowledge in the subject that we are sure will translate as a real and well founded tool... We are greatly impressed by your intervention and we are convinced that the support of Global Village Engineers provides in this situation is of great importance..."*

Director  
Sierra Gorda Biosphere Preserve  
Mexico

In 2002, the national power company proposed construction of an electricity transmission line that would pass directly through the Reserve. The Reserve staff knew it would be necessary to understand both sides of the



project: the need to provide electricity versus the need to preserve the valuable ecosystem.

Global Village Engineers conduct public workshops for GESG staff and concerned citizens, to share information about how power line projects are planned, designed, and constructed. With GVE's assistance, the Reserve was better prepared to negotiate alternatives rather than simply opposing the one design presented. ■

## Other Projects - 2002



### **San Carlos Lempa, El Salvador (SHARE Foundation)**

Assisted communities monitor and understand the ongoing construction of a flood control levee

### **La Oroya, Peru (Oxfam-America)**

Prepared a guidance document explaining the lead smelting process and its effects on the environment

### **Misión de Bucareli, Mexico (Grupo Ecológico Sierra Gorda)**

Prepared a guidance document explaining the truths and myths about constructing new water supply reservoirs

### **Shar-I-Buzurg District, Afghanistan (Oxfam-America)**

Created fact sheets illustrating the benefits and drawbacks of hydraulic ram pumps for water supply systems

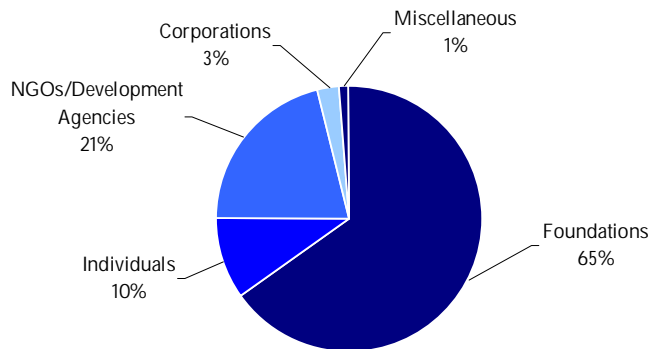
### **Central America (Interaction / Bank Information Center)**

Planned public information workshops for communities affected by Plan Pueblo Panama

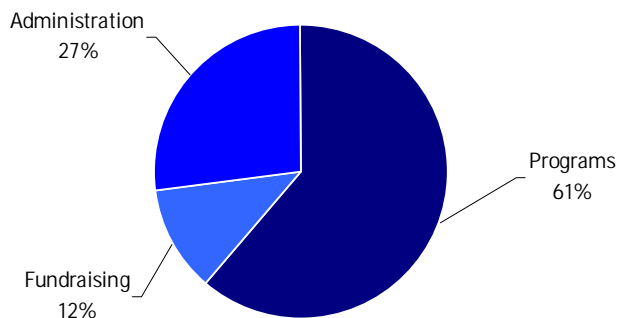
*Statement of financial activities  
for the year ending October 31, 2002*

## Financials

**Total Income: \$34,761**



**Total Expenditures: \$21,945**



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In 2002, with funding from new donors and organizations, Global Village Engineers continued existing programs in El Salvador and Nicaragua to while expanding into new areas, such as Mexico and Cambodia.

February 2002, Global Village Engineers completed its first Winter fundraiser. Donors, including engineers and engineering companies, contributed over \$3,000.

In 2003, Global Village Engineers will continue its commitment to develop and execute programs in a manner that respects costs while achieving the greatest social impact possible. ■

# Donors and Volunteers

## *Individuals*

Mary & Walter Alessi	Domenic D'Eramo	William Moeller
Juan Amodei	Lisa De Vellis	Philip Murnion
Robert Bellhouse	Suzanne Elsesser	John Murphy
Thomas Bergerou	Barbara Fiorito	Mary Norman
Beryl Bissel	Zenobia Fox	Donald Pottle
Clifford Bruell	Don & Janine Gordon	Robert Rivituso
Barbara & Benedict Castellano	Ellen Horton	Edward Serowik
Jim Conroy	Ed Ionata	Thomas Shimkin
David & Priscilla Cotter	Ellyn & Andrew Jett	Charles Shu
Rod DeMartini	Tony & Sandy Lieto	April Singer

## *Corporate Support*

**Geo Hydro Cycle, Inc.**  
Newtonville, Massachusetts

**Pre-Mix Industries, Inc.**  
Clinton, Maryland

**Jacobs Consulting, Inc.**  
Newton, Massachusetts

**Clearwater Environmental**  
Rutland, Massachusetts

## *Foundations*

Wind & Fire Foundation	Renew International	Mekong Project
Cushman Foundation	Shimkin Foundation	Development Facility
Oxfam-America	Parish Evaluation Project	

## *Volunteers*

Angelina Arreola	Bruce Jacobs	Brian Oberg
Santiago Basualdo	Kamal Bikram Khadka	Dave O'Callaghan
Mat Brener	Sandip Koodali	Donald Pottle
Mark Bukowski	Heather Laidlaw	Tania Roth
Chris Busch	Veronica Lassa	Audrey Sall
Gary Cuniff	Sylvia Lee	Burton Segall
Amy D'Amico	Andrew Lehman	Elizabeth Segleau
Jennifer Davis	Juan Mantiega	Jay Sheehan
Lisa De Vellis	Michael Markulec	Erin Shutak
Frank DeFalco	Kim McCoy	Josh Spangrud
Matthew Donahue	Don McHarness	Ann Thomas
Liz Dupre	Swati Mehta	Cam Vien
Dave Dyet	Ayaz Memon	Carolyn Weymouth
Brendan Ennis	Umar Mirza	Katie Wilhelm
Irene Escajadillo	Bill Moreno	Shirley Willett
Mark Ganguli	Tina Murphy	Baapen Yan
Keat Goh	Kelly Naylor	Steve Yonchak
Victor Grau-Serrat		
Cynthia Hart		
Antonio Hernandez		
Eugene Humbles		
Tamsyn Hunnewell		

*"I can honestly say that I've never met such a wonderfully well-rounded group of intelligent, interesting, and impassioned engineers. I, therefore, owe my desire in seeking continued education in an engineering related field to GVE. Global Village's mission has permeated every aspect of my life..."*

GVE Volunteer