

March, 2010

# STRATEGIC PLAN



**[pictured] Kenya: woman to irrigate fields**

In March 2009, members of the EWB-USA Northern New Jersey Professional chapter visited Kipingi Kenya to visit previously installed water pumps that serve several villages. Here a Kipingi woman, after waiting in line for her water, carries her child from the pump to her home with the filled bucket of water on her head.

(Photo by Jami Bjornstad)

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**[pictured on cover] Humanzanao, Peru: Princeton University new stove construction**

EWB-USA Princeton members Meghan McNulty and Andres Moreno are shown with Dona Paloma, summer 2008 in Huamanzana, La Libertad, Peru. Princeton's project was to implement an improved stove design that would completely remove all the smoke from the home, as well as reduce the amount of fuel needed and allow for cleaner, more complete combustion of that fuel. This stove was built in what used to be her kitchen, before excessive rains destroyed the roof. (Photo by Hank Song, current Peru project manager)

# EXECUTIVE SUMMARY

## VISION

Our vision is a world in which the communities we serve have the capacity to sustainably meet their basic human needs, and that our members have enriched global perspectives through the innovative professional educational opportunities that the EWB-USA program provides.

## MISSION

EWB-USA supports community-driven development programs worldwide by collaborating with local partners to design and implement sustainable engineering projects, while creating transformative experiences and responsible leaders.

## CORE VALUES

**INTEGRITY** Being honest, credible, trustworthy, and respectful as staff and community development project work is conducted.

**SERVICE** Serving developing communities.

**COLLABORATION** Executing projects in the framework of partnerships.

**INGENUITY** Being adaptable, flexible, inventive and entrepreneurial as community development and project work is planned, designed, built and commissioned for long term operations.

**LEADERSHIP** Being purpose-driven; team centered; adventurous; innovative; responsible; respectful; open; inclusive; and influential by actions demonstrating character, professional excellence and integrity.

**SAFETY** Being committed to safeguarding the health, safety and security of all members, partners and communities by the identification and mitigation of risk and acting with deference to safety and security as work is conducted.





**Our vision is a world in which the communities we serve have the capacity to sustainably meet their basic human needs, and that our members have enriched global perspectives through the innovative professional educational opportunities that the EWB-USA program provides.**

[pictured] A local community member shows the children how to pump the clean water.  
(Photo courtesy of EWB-USA Duke University)

## GUIDING PRINCIPLES OF EWB-USA

EWB-USA has three guiding principles, or long-term competitive strategies, which act as an underlying framework in the fulfillment of its mission elements and differentiates EWB-USA from other service organizations, professional societies and academic institutions. These principles, along with the core values, guide the EWB-USA organization and ensures that as it moves forward, it continues to:

### DELIVER SUSTAINABLE AND APPROPRIATE COMMUNITY PROJECTS

Great projects result in sustainable programs for the communities EWB-USA serves and utilize appropriate management processes and technologies in order to deliver best practices.

Great projects:

- Result in substantial improvement in the quality of life in the community;.Can be readily operated, maintained, and repaired by members of that community.
- Maintain the health, safety, and security of all participants throughout the duration of the project.

### PROVIDE TRANSFORMATIONAL EDUCATION

Great projects not only deliver high value to the communities they are focused on, they also deliver exceptional educational experiences to those who participate. They bring excitement and value to EWB-USA members' work, and they encourage participation and drive membership. EWB-USA members and partners report that participation in EWB-USA projects is a life-changing experience. For some, this means gaining an understanding of the profound level of poverty that exists in the world, and how engineering and related disciplines can make a positive difference in the lives of those who live in poverty. Others report gaining a deeper understanding about the practice of engineering, construction, and operations; including the challenges of planning, design, financing, logistics, construction, commissioning and operations experienced through the life cycle of a project. Transformational educational experiences are also the result of working together in teams of students, faculty, pro-

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**Great projects not only deliver high value to the communities they are focused on, they also deliver exceptional educational experiences to those who participate.**

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*Cambodia Water Dam Project to place a watergate for the Balang Commune. This project serves at least 18,000 people. This project utilized too many volunteers to list and we averaged three to four site visits a year. (New York Professional Chapter)*



#### BEFORE

*This photo shows a particular area "before" and "after" the installation of the community gardens.*



fessionals, and members of the community.

## PROVIDE OPPORTUNITIES FOR CONSTANT NETWORKING AND COMMUNICATION BETWEEN INVESTED PARTIES AS A MEANS FOR SHARING OF BEST PRACTICES

Through the project delivery model, EWB-USA has formed a communications “hyper-network” which improves the EWB-USA experience by capturing and building upon the unique spirit and camaraderie that result from participating in the organization and its projects. This hyper-network connects members and partners so they can easily share knowledge, best practices and experiences, and so they can develop educational and career-oriented relationships in addition to friendships.

EWB-USA will make it easier for members and partners to access information and connect with



CHARISMA, FROM ABHEYPUR INDIA, ENJOYS FRESH WATER FROM A SOLAR-POWERED WELL. UNIVERSITY OF HARTFORD CHAPTER (PHOTO BY DAVE COOLEY)

each other. And in times of urgency, the EWB-USA network will be able to call upon the talents of thousands of highly motivated, versatile, and capable people.

## OPERATIONAL STRATEGIES

There are organizational prerequisites (structure, processes, tools, talents, financial strength, relationships, alliances, etc.) that must be in place to achieve

EWB-USA’s mission in alignment with its three guiding principles. EWB-USA has chosen four operational strategies complete with measurable objectives, tactics and key metrics to enable organizational strength building in accord with its current priorities and imperatives.

To accomplish its mission and goals, EWB-USA will begin working towards fulfilling these operational strategies, as defined below:

*AFTER*  
The community gardens were fed by windmill-generated water through a snaked, drip-line irrigation. (Photo from the EWB-USA Valparaiso University Chapter collection and taken in May 2006)

*Prof. Jered Ochieng Baraza, project manager for the Nyamilu Integrated Community Water Project, demonstrates pumping in the Nyamilu community. He was working with the EWB-USA teams that completed that project during the summer of 2006. (San Luis Obispo Professional Chapter)*

### RESULTS



## **B**UILD AND DELIVER AN EFFECTIVE AND EFFICIENT INFRASTRUCTURE TO SUPPORT EWB-USA'S MISSION

The structures and processes of EWB-USA were put in place upon the organization's foundation in 2002. Today, updated structures, processes and tools are necessary to ensure a strong project delivery system and provide educational training for our members that ensure the quality of projects consistent with EWB-USA principles and values.

The following objectives have been set in order to accomplish this strategy:

- Build and strengthen the project delivery system through a focus on project quality.
- Ensure that the technologies and project delivery systems are appropriate and sustainable to the communities in which EWB-USA works.
- Ensure the health, safety, and security of our members and our communities.
- Improve the skills and qualifications of EWB-USA members through a multi-topic and multi-disciplined educational program that meets the priority needs of the members and the organization.
- Build a communications department and strategy to facilitate the development, dissemination and application of knowledge and resources through EWB-USA.
- Create fully integrated software systems which allow for the accumulation, storage and sharing of EWB-USA information amongst its members.

## **R**ECRUIT AND RETAIN THE RIGHT PEOPLE

It is important to recruit, retain, and develop members who are culturally aligned with the vision, mission, core values and guiding principles of EWB-USA. It is also important that service organizations, professional societies and donors with whom EWB-USA partners are also culturally aligned.

The following objectives have been set in order to accomplish this strategy:

- Strengthen the volunteer governance bodies of EWB-USA by policy development, leveraging individual professional relationships, governance, oversight, education, and engaging in financial development strategic planning.
- Strengthen the staff of EWB-USA and improve the capacity and abilities to match the growth and development needs of the organization.
- Beyond the essentials of cultural alignment, members of governance bodies, national and regional staff and project teams must possess and practice the skills, competence and resource commitments required of their position to meet the needs of EWB-USA.

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**Attracting and fostering effective partnerships is essential to the success of EWB-USA. Collaborative partnerships not only assist in funding the organization, but also generate inspired valuable partners and ambassadors.**

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## **B**UILD SUSTAINABLE FINANCIAL STRENGTH

EWB-USA must ensure that its revenue grows to match its organizational needs. The organization must ensure that its system of receiving, accounting and stewarding of revenue provides an open and transparent system by which the government, organization and donors are assured that funds are being expended in a prudent and ethical manner. The following objectives have been set in order to accomplish this strategy:

- Build and strengthen the development department's infrastructure and framework such that it can build and maintain a substantial, robust, and diverse portfolio of contributors, supporters and advocates, commensurate with achieving our growth and development plans.
- Provide fundraising education for chapters to assist in maintaining a sustainable funding stream for their programs.
- Build awareness of the organization within the general public and potential donors through marketing, advertising and media.
- Strengthen the business functions of

EWB-USA so that the financial operation is conducted in accordance with Generally Accepted Accounting Principles and is available and transparent to the EWB-USA organization.

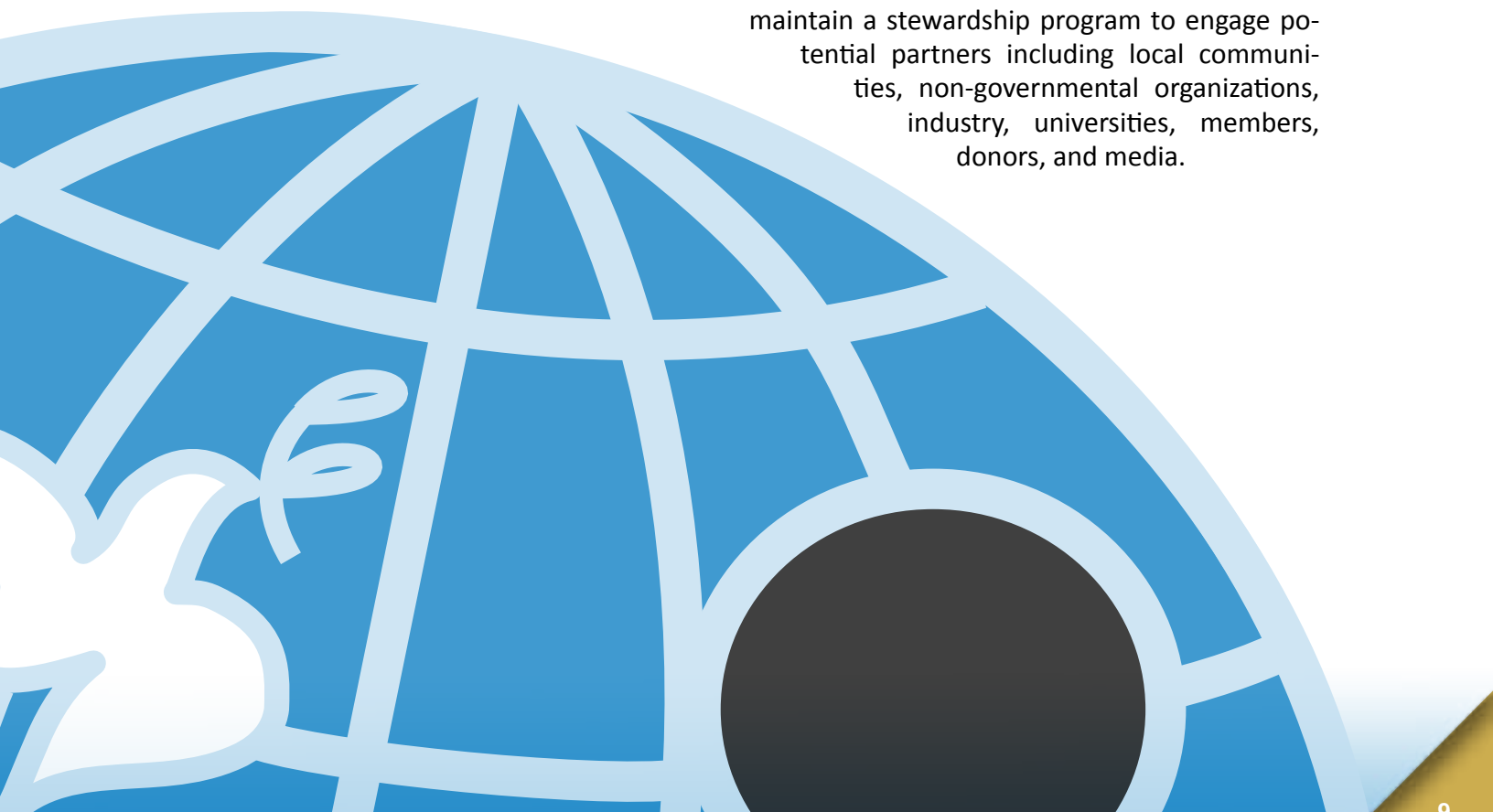
- Manage the overhead of the organization to the target cited in the Annual Plan.

## **A**TTRACT AND FOSTER EFFECTIVE PARTNERSHIPS

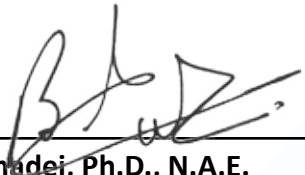
Attracting and fostering effective partnerships is essential to the success of EWB-USA. Collaborative partnerships not only assist in funding the organization, but also generate inspired valuable partners and ambassadors. The following objectives have been set in order to accomplish this strategy:

- Establish relationships with partner community leaders, community organizations and influential non-governmental organizations through the implementation of sustainable community programs.

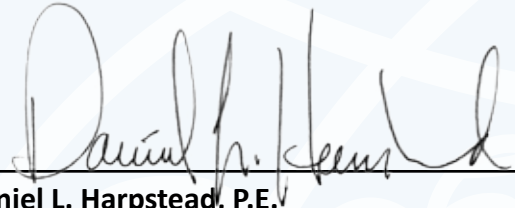
Build relationships with universities, industry, non-governmental organizations and governmental organizations to create a synergistic approach to community development. Build and maintain a stewardship program to engage potential partners including local communities, non-governmental organizations, industry, universities, members, donors, and media.



# BOARD AUTHORIZATION OF STRATEGIC PLAN



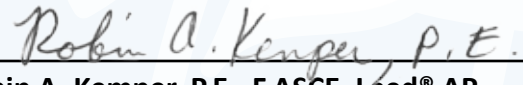
**Bernard Amadei, Ph.D., N.A.E.**  
Professor of Civil Engineering  
Director, Mortenson Center in Engineering for  
Developing Communities  
Founder, EWB-USA



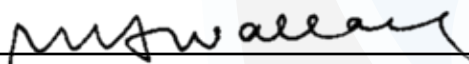
**Daniel L. Harpstead, P.E.**  
Principal, Kleinfelder, Inc.  
Treasurer, EWB-USA



**David Stewart, Ph.D., P.E.,**  
President of the Board  
President and CEO  
Stewart Environmental Consultants



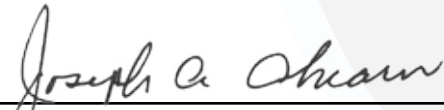
**Robin A. Kemper, P.E., F.ASCE, Leed® AP**  
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ASCE Representative to Governing Board



**William A. Wallace**  
President, Wallace Futures Group  
Past President, EWB-USA



**Catherine A. Leslie, P.E., Executive Director**  
Engineers Without Borders-USA



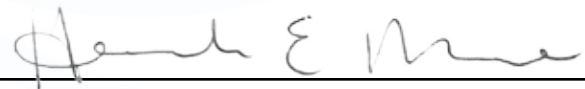
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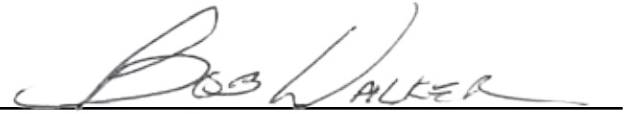


**Hannah E. Moore**  
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Student Representative



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CH2M HILL  
Professional Representative



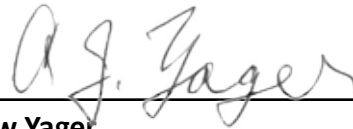
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# EWB-USA ORGANIZATIONAL DESCRIPTION: A UNIQUE PROPOSITION

## HISTORY

Engineers Without Borders–USA (EWB-USA) began with an idea: connect a developing community that has a specific infrastructure need to engineering students able to design a solution to that need. This idea of engineering students assisting developing communities resonated in the engineering and university communities.

Since its incorporation in 2002, EWB-USA has grown from approximately eight engineering students and a civil engineering professor to an organization of over 12,000 students, faculty and professionals. Working through over 250 university and professional chapters throughout the U.S., the dedicated members of these chapters have completed over 100 projects and have more than 400 projects underway in over 45 countries. Today, EWB-USA’s membership continues to grow, limited only by the organization’s infrastructure and ability to ensure the quality and sustainability of the community programs.

In April 2000, Angel Tzec, a representative of the Belize Ministry of Agriculture, invited Dr. Bernard Amadei, Professor of Civil Engineering at the University of Colorado at Boulder, to visit San Pablo to examine the possibility of designing and installing a water delivery system to the village. Since the village had no electricity, running water, or sanitation, and because most villagers worked at a nearby banana plantation, the responsibility for carrying drinking and irrigation water from a nearby river to the village fell to the village children.

Recognizing that a system for bringing water from a nearby river to the village would make a major difference in the lives of the villagers, Professor Amadei decided to take on the project. He returned to Boulder and recruited eight University of Colorado students in civil and environmental engineering, as well as Denis Walsh, a civil engineering expert from Boulder, CO. This team set to work, designing and installing a ram pump and a water distribution system. With the help of the local community, the entire project was completed in May of 2001 at a cost of about \$14,000.

**And, so began EWB-USA.**



**Since its incorporation in 2002, EWB-USA has grown from approximately eight engineering students and a civil engineering professor to an organization of over 12,000 students, faculty and professionals.**



[pictured] Mali: Dr. Bernard Amadei and children of the community

## LESSONS LEARNED FROM BELIZE - A CATALYST TO CHANGE

Upon the return from Belize, Dr. Amadei realized the importance of this small infrastructure project in the community. This community development project uncovered two far-reaching fundamental and unmet needs related to international aid through community development and engineering education.

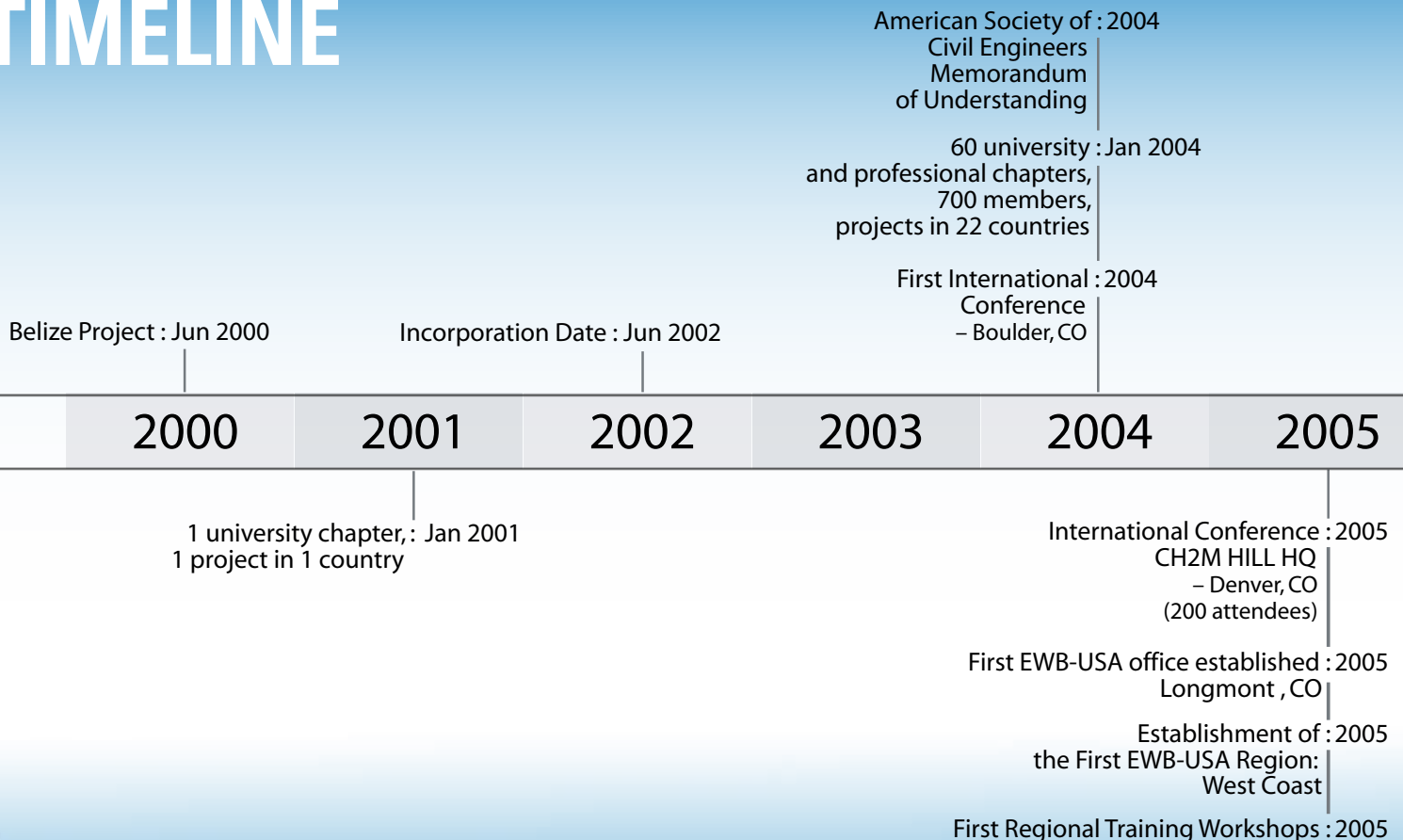
**A**ssistance to developing communities. Most people are aware that profound poverty exists in the developing nations, and that the world's international aid agencies are actively engaged in assisting these nations in improving their quality of life. However many people don't realize that, due to reasons of efficiency, most of this international aid is directed toward the larger population centers, missing the smaller com-

munities like San Pablo, Belize. In reality, smaller communities, much like the larger ones, lack the same sort of basic infrastructure, e.g., water, sanitation, electricity, communication, transportation. While the need for infrastructure is the same, the scale and complexity of the solutions are small and fall below the attention and scale of large aid organizations although they are within the capabilities of volunteer teams.

### Hands-on project experience in engineering education.

While the knowledge content of university engineering curricula is technically comprehensive, there is a significant disconnect between engineering knowledge and application in most programs. The San Pablo project gave students the opportunity to enhance their university learning and deliver a needed solution—water supply and distribution—to the community. This gave the students a real-life opportunity to see how

## TIMELINE



their acquired engineering knowledge could be applied in real-life community situations.

Students, supervised by Dr. Amadei, worked side by side with San Pablo community members. They were able to experience firsthand both the challenge and satisfaction of completing a meaningful engineering project, one which made a real improvement in the quality of life for that community. The same students also experienced the need for additional knowledge in the non-engineering skills, which included comprehensive communication abilities, whole-systems thinking, cultural intelligence, trust, team building and innovative thinking, all of which are required for successful community development projects. Given the choice between putting their learned knowledge to work

on a real-world project with real impact versus a hypothetical classroom project, it is not surprising that engineering students want to take on projects like San Pablo, and make a real difference in the community.

Upon completion of the San Pablo project, the villagers received an improved water supply.

More importantly, the children, relieved of their water carrying duties, could go to school. The engineering students and the professor applied their knowledge about the design and

delivery of water systems in a developing community, and they returned transformed, having seen firsthand how their engineering knowledge can make a difference in the lives of people in developing communities.

**The EWB-USA approach not only utilizes whole system engineering when designing and implementing solutions in developing communities, but also integrates health, social, economic, and environmental factors into all projects.**



The students at the University of Colorado at Boulder became the first EWB-USA student chapter following the San Pablo, Belize project. This chapter expanded to 96 students working on three projects by the end of 2002. By the end of 2003, participation grew to 545 students in 13 chapters, working on 13 projects in nine countries. Not surprisingly, interest in EWB-USA then spilled over to the professional engineering community. In 2004, EWB-USA added two professional chapters organized and run by career engineers. The addition of the professional chapters provided oversight and mentorship for the student chapters and projects, and also added the capability of delivering engineering assistance in more complex situations.

The EWB-USA approach not only utilizes whole system engineering when designing and implementing solutions in developing communities, but also integrates health, social, economic and environmental factors into all projects. Chapters work directly with the community and the local NGO in a long-term partnership to implement solutions that utilize appropriate technology, are easily maintained, and replicable in surrounding communities. It is through this process, which includes careful oversight from the national EWB-USA organization, that EWB-USA members have come to positively impact lives around the world.

Today, the EWB-USA organization continues to grow and gather strength. Implement-

ing solutions in the developing world presents challenges and learning experiences that cannot be read or studied. Developing communities are some of the world's most sensitive working environments where even minor changes can lead to dramatic effects, both positive and negative. Team members are forced to think across disciplines and interact with others in the fields of health, economics, government and business to align the interest of those stakeholders with the primary focus of the project: **the community**. Through this focus on

community, EWB-USA challenges its members in ways that force personal reflection and growth in non-traditional engineering skills.



MIKE BOZEK (EWB-USA UNIVERSITY OF PITTSBURGH) GETS ASSISTANCE FROM THE MAKILI, MALI VILLAGE CHILDREN DURING A TOPOGRAPHIC SURVEY FOR THE FISH POND PROJECT, 2008.

## MOVING BEYOND BELIZE INTO A GLOBAL ENVIRONMENT

At first glance, the value proposition of EWB-USA seems fairly straightforward: students, academics and professionals work on project teams to design and deliver small infrastructure projects to developing communities. EWB-USA is at the forefront of delivering infrastructure programs that also deliver a hands-on educational opportunity not typically found within university academia, thereby establishing a unique and highly valuable service offering what few organizations are capable of delivering.

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**The United Nations has adopted an approach to emphasize small-scale solutions developed in partnership with local communities. Since its inception, EWB-USA has chosen the delivery of smaller scale infrastructure projects within an overall community program framework as its program delivery model.**

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## MAKING A TANGIBLE DIFFERENCE IN THE WORLD

The problems of the globe seem so immense, it is sometimes hard to see how individuals can make a difference. Many of the infrastructure projects in the developing world over the past half-century have failed because the necessary education and revenue to maintain them was not available. In response, the United Nations has adopted an approach to emphasize small-scale solutions developed in partnership with local communities.

Since its inception, EWB-USA has chosen the delivery of smaller scale infrastructure projects within an overall community program framework as its program delivery model. At its core, the EWB-USA model is rooted in practical engineering solutions.

However, in order to be successful, program designers must consider a wide range of inputs from the socio-cultural dimensions of the community to local project ownership and other requirements for long-term project viability.

EWB-USA programs are full partnerships with a host community and one or more local non-governmental organizations (NGOs). It is these partnerships which form the basis of a long-term relationship in order to assure the basic infrastructure needs of the community are met and will remain sustainable long after direct chapter involvement ends.

Successful community programs are a long-term collaborative relationship with a host community in which there are a series of engineering projects over time. These individual engineer-

ing projects involve planning, assessment and implementation phases which range in duration from one week to several months. This model assures community participation and ownership and responsibility for the program, essentials to long-term sustainability.

It is the combination of the EWB-USA long-term community development approach, focused on appropriate technology and sustainability along with the enhancement of the engineering education, which makes EWB-USA a unique proposition in the sea of many NGO's and universities.

## PARTICIPATING IN A TRULY LIFE-CHANGING EDUCATIONAL EXPERIENCE – MOVING FROM COURSEWORK TO CONTEXT

In a world of rapidly expanding science and engineering knowledge, providing the proper educational and contextual foundation for an engineer is an ever present and growing challenge. Once graduated, the new engineer is prepared to take on very limited assignments, regardless of the courses taken. EWB-USA offers an opportunity and provides a deeper contextual foundation in a real world situation, which supplements typical engineering curricula and helps to narrow the knowledge gap through additional experience.



SITE VISIT TO BELEN, PERU, WHERE A MEDICAL CLINIC WILL BE BUILT

EWB-USA participants have the opportunity to experience how their engineering knowledge, skills and efforts can make a significant difference in the lives of people in developing communities, typically in areas of significant poverty. These differences are profound. Virtually all of the students, academics and professionals that have participated on EWB-USA projects, having

traveled to developing communities and worked with community members, have described the experience as truly life-changing.

Prior to volunteering with EWB-USA, most participants are aware of the tragic conditions of poverty in developing communities and believe that, as engineers, they have the ability to make a difference. However, EWB-USA members learn more than the simple realization of the existence of poverty and the need for engineering support. They learn about the challenges of implementing solutions in the developing world and that these challenges cannot be solved with engineering alone. They also begin to understand that the key to successful community development is their ability to learn as much from the community as the community is learning from them. Once involved in EWB-USA projects, most participants come away with a new world view, a special and personal understanding of new cultures as well as the day to day challenges faced by people in the developing world.

## ATTRACTING A DIVERSE SET OF STUDENTS INTO SCIENCE AND ENGINEERING

EWB-USA is demonstrating an uncommon ability to attract new minds to the science and engineering professions by redefining technical skills

as requisites for leading change that serves to benefit humanity. This reinvigoration of the excitement around engineering and the sciences is essential to filling the national pipeline with lifelong talented professionals.

The purposeful work of EWB-USA and the resulting educational richness bridges the gap between university coursework and real-world application. This unique experience attracts a special breed of student, a student that not only has a keen interest in their chosen engineering discipline, but who also demonstrates innate characteristics of ingenuity, compassion, dedication, enthusiasm and an unwavering commitment to success in the implementation of an engineering solution in a developing community.

The work of EWB-USA has the potential of attracting more women into science and engineering. Anecdotally, women students and professionals working in EWB-USA have stated that the work of EWB-USA

transforms the character of engineering from one of processes and calculations to one of people, health and community. The percentage of women student and professional members in the EWB-USA organization is over 40 percent, notable because the overall percentage of women earning bachelor's degrees in engineering is just under 20 percent.



THE UCSB CHAPTER OF EWB HELPS WITH SCHOOL SOLAR PROJECT IN ARAPALLPA, PERU



DYLAN REBOIS AND ENGINEER DANIEL ENGIDASHET BUILD A REINFORCED MASONRY COLUMN FOR THE YOUTH CENTER IN ADDIS ALEM, ETHIOPIA (EWB-U MARYLAND)

EWB-USA has developed a platform that attracts the most talented, self-motivated students and professionals not only from the engineering profession, but from all backgrounds. These volunteers demonstrate the evidence of ingenuity, compassion, dedication, enthusiasm and success.

It is clear that the EWB-USA has the potential to provide a long-term value to the engineering profession as a whole, not just to the engineering student population. The number and diversity of professional members is increasing over time and is noteworthy, as it reflects the desire of graduating student members to continue their involvement in the EWB-USA throughout their professional careers.



ROOF GOES ON SCHOOL LIBRARY IN USALAMA, KENYA

The capability and value of this network was demonstrated in 2008, when EWB-USA won a national contest sponsored by Parade Magazine and the Case Foundation to see which charity organization could generate the highest number of donations over the Internet in a two month period. Even though EWB-USA learned about the contest with only three weeks to go, the development team sent out a broadcast message across the EWB-USA network asking for donations. The network responded quickly and EWB-USA won the contest by a substantial margin, demonstrating the power of the EWB-USA network.

## FACILITATING LIFE-LONG LEARNING

It is obvious to anyone in the engineering profession that acquiring new engineering knowledge is a life-long endeavor, one that is never completely fulfilled. New engineering challenges seemingly arise every day along with advances in the technologies to address them. Here, the engineer's role is to address these challenges in ways that are efficient and effective while protecting the health and interests of the public.

This role also includes that of technological gatekeeper: screening, evaluating and applying new technologies that can satisfy the project owner's operational requirements while balancing the promise of improved performance against implementation risk.

## NETWORKING ACROSS DISCIPLINES AND ACROSS GENERATIONS

As the EWB-USA organization has expanded over the past few years, an informal but highly valued network has developed within the membership. The EWB-USA project experience has created a wide network of students, faculty and professionals who have the same interests and values, and have worked through the trials and successes of delivering projects in a developing region of the world. The network cuts across the profession in terms of roles and generations, closely connecting students, faculty and professional members as well as EWB-USA staff. A strong camaraderie exists within the network, providing a forum for exchange of ideas, resources and assistance.

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**The EWB-USA project experience has created a wide network of students, faculty and professionals who have the same interests and values, and have worked through the trials and successes of delivering projects in a developing region of the world.**

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requirements while balancing the promise of improved performance against implementation risk.

EWB-USA offers new avenues for maintaining and expanding engineering knowledge and competencies. Through the EWB-USA network, members have access to a broad, multidisciplinary array of faculty and professionals engaged in a multiplicity of projects. The network also fills an existing gap in the learning life cycle, the one between student and mid-career professional, a gap that the professional societies have been struggling to fill. Graduating EWB-USA student members can move into their professional careers still connected to the EWB-USA network. This provides a connection point for the engineering societies to engage the young professionals and offer opportunities for continuing education.

## FULFILLING CORPORATE SOCIAL RESPONSIBILITIES THROUGH SUPPORT OF EWB-USA

Increasingly, corporations look upon EWB-USA as a productive pathway for meeting their responsibilities and obligations to society. In today's "google" world, the public has access to information about corporate performance, good and bad. Using the new information and communication tools, NGOs and other public interest groups can transmit this information instantly to a broad audience across



the world, strongly influencing public opinion and affecting a corporation's bottom line. In effect, the public is setting *de facto* standards for corporate social performance.

Based on this understanding, corporations have sought to demonstrate their commitment to improving their performance across a number of dimensions of sustainability including social performance. Here, corporations are beginning to recognize that supporting and becoming involved in EWB-USA activities offers a demonstration of corporate social responsibility.

- Recognition in the media. Over the past seven years, EWB-USA has developed a strong reputation as a vi-

able aid organization. Stories showcasing EWB-USA have appeared in Time, Newsweek and Engineering News Record, to name a few. Association with and support of EWB-USA is viewed as highly positive, internally as well as externally to the corporation.

- Tangible outcomes. While money is important, credible and lasting demonstrations of social responsibility involve more than just writing a check. EWB-USA's projects result in tangible outcomes that corporations can point to as the results of their support and commitment to social good.
- Education and training. Corporations that support EWB-USA have discovered that the involvement of their professionals on EWB-USA projects provides those professionals with a special kind of project management education and cultural immersion. Participants learn first hand the problems of delivering projects in a developing community. Issues of travel, logistics, labor and materials create entirely new project management challenges that require exceptional flexibility and ingenuity to resolve. Experience on such projects help the participants develop and test their project management skills in ways that they perhaps never imagined.
  - Recruiting and networking. Close, regular involvement with EWB-USA and its projects provides corporations with the chance to observe and work with students. Corporations can and have used this opportunity regularly to recruit the best and the brightest students.



# EWB-USA TODAY

Through the past seven years, EWB-USA has found a niche in the myriad of non-governmental organizations and educational organizations.

EWB-USA's approach to assisting developing communities in itself is not unique. What distinguishes EWB-USA from other community development organizations is its combination of technical expertise, its long-term presence within the community, and the highly valued educational opportunities provided to its members.

Given the immensity of the issues facing the global population, there is no shortage of communities that desire technical assistance. The demand for community programs continues to grow and is only limited by EWB-USA's infrastructure to ensure such growth is done in a thoughtful, strategic and sustainable manner.

The educational opportunities are unique within the U.S. academic institutions and are highly valued by universities, students, professional groups, engineering and construction firms, donors and supporters. The demand to establish additional operating chapters remains exceptionally strong.

During 2009, the growth of both community programs and operating chapters was curtailed in order to allow the organization to strengthen its infrastructure and to focus on the quality and effectiveness of both the community programs and education of its members. During this timeframe, EWB-USA embarked upon an update of its Strategic Plan and Governance Policies to ensure a highly effective organizational structure and to ensure the delivery of high quality and sustainable projects to developing communities, while transforming the educational and life long learning experiences of multi-discipline rising leaders.





**Given the immensity of the issues facing the global population, there is no shortage of communities that desire technical assistance. The demand for community programs continues to grow and is only limited by EWB-USA's infrastructure to ensure such growth is done in a thoughtful, strategic and sustainable manner.**

**[pictured] Uganda: Duke examining water samples**

EWB-USA Duke students, Ben Abram (holding the rain gauge) and Lee Pearson demonstrate the rain gauge to a group of students from Kasaka and Kanoni, Uganda during their assessment trip in summer 2006.

# EWB-USA VISION, MISSION AND VALUES

## VISION

Our vision is a world in which the communities we serve have the capacity to sustainably meet their basic human needs, and that our members have enriched global perspectives through the innovative professional educational opportunities that the EWB-USA program provides.

EWB-USA's vision has two components: one of building the capacity of developing communities to meet their basic human needs in a sustainable manner, and one of providing innovative professional educational opportunities that offer an important global perspective of the developing world. It is this combination that creates EWB-USA's uniqueness and value for addressing important unmet needs in both community development and education.

## MISSION

EWB-USA supports community-driven development programs worldwide by collaborating with local partners to design and implement sustainable engineering projects, while creating transformative experiences and responsible leaders.

At the core of EWB-USA's mission is the principle that it is the communities we serve who must drive their development. As our clients, they are senior partners in the development process. The success of these community programs can only be achieved as a result of collaboration with communities and other partners in the design and implementation of sustainable engineering projects. EWB-USA believes that transformation of an individual can only occur as a result of service above self, rather than focus on the self. Through its focus on community-driven and sustainable development programs, EWB-USA provides a unique educational experience that transcends the confines of the project.





**EWB-USA supports community-driven development programs worldwide by collaborating with local partners to design and implement sustainable engineering projects, while creating transformative experiences and responsible leaders.**

**[pictured] The first time Nacho and Wendy get to play in the water. Greater Austin Professionals build a water tank foundation in the desert of Jaboncillos Chicos in Ocampo, Coahuila, Mexico.**  
(EWB-Greater Austin Professionals)

## CORE VALUES

EWB-USA has established six core values that the organization considers fundamental and essential for its people, operations and mission achievement:

### **I****NTEGRITY: Being honest, credible, trustworthy and respectful as community development project work is conducted**

EWB-USA members understand that professionals are expected to engender trust and confidence among all stakeholders in their work. Members have a strong sense of right and wrong and act with a moral obligation to do that which is right. They stand up and speak up for what they believe in, protect confidential information and interests, encourage ethical discussions of issues, and follow through with commitments. They are open, engaging and inclusive communicators; they clarify and express values, build relationships and align ideas. They deal honestly and respectfully with community partners, donors, teammates and business associates. They abide by all applicable laws, professional standards and appropriate community standards and protocols. EWB-USA members know that whatever qualities and talents they might have, integrity is the value that transcends all individual and organizational attributes. All members uphold the core values and reputation of EWB-USA.

**S****ERVICE: Serving the developing world**  
EWB-USA members are committed to serving the needs of communities around the globe. They share a professional dedication—a “calling”—to build a better world by engaging in hands-on community development work. This

service commitment extends to the communities in which they work, the team members with whom they work and to themselves as a means of personal and professional development.

### **C****OLLABORATION: Executing projects in the framework of partnerships**

Successful EWB-USA projects are the outcomes of ethical and engaging leaders and high performing team members fulfilling goals through thoughtful needs assessments, timely management decisions, effective problem solving and project execution and the celebration of success with community partners. EWB-USA projects are community-driven. EWB-USA members value the visions of local communities and collaborate with communities to realize those visions.

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**Successful EWB-USA projects are the outcomes of ethical and engaging leaders and high performing team members fulfilling goals through thoughtful needs assessments, timely management decisions, effective problem solving and project execution, and the celebration of success with community partners.**

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EWB-USA members recognize that a broad cadre of academic, public and private sector enterprises and donor agencies must be aligned in operating partnerships in order to implement sustainable and equitable community development projects.

### **I****NGENUITY: Being adaptable, flexible, inventive and entrepreneurial as community development and project work is planned, designed, built and commissioned for long term operations**

EWB-USA members recognize that integrating known and unknown political, social, technical, economic and cultural factors throughout the duration of a project is essential to implementing sustainable and equitable community development projects. EWB-USA project teams incorporate ingenuity into project elements such as cultural training, project management and sustainable design, construction, and operation solutions.

**L**EADERSHIP: Being purpose-driven; team centered; adventurous; innovative; responsible; respectful; open; inclusive; and influential by actions demonstrating character, professional excellence and integrity

EWB-USA members recognize the power and potential of effective leadership. They aspire to develop leadership skills that impact project achievement as well as personal and professional development. EWB-USA members understand that leadership is a quality that goes beyond the science of management and the promise of technology. Leadership is built on the pillars of service, collaboration, ingenuity and integrity. The individual talents, skills, core values and world views of EWB-USA members are reflections of their commitment to developing qualities of leadership.

**S**AFETY: Being committed to safeguarding the health, safety and security of all members and community members by the identification and mitigation of risk and acting with deference to safety and security as work is conducted

EWB-USA members are personally obligated to safeguard those they serve, those they serve with and themselves. Members recognize that their mission (planning, designing, mobilizing, constructing and commissioning sustainable engineering projects) presents health and safety risks. They also believe that accidents and breaches in health and security protection are preventable through strong leadership and individual member's safety / health / security preparation, consciousness and discipline. This "target zero" culture and commitment flows from EWB-USA's governance bodies and throughout its entire organizational structure, processes and tools. Safety/Health/Security for those we serve, those we serve with and ourselves is priority one.

*Enthusiastic children, under the watchful and gleeful eye of their mother, dig a trench for the EWB-USA Johns Hopkins University project.*



*This photo shows how the women of the villages surrounding Agua Negra, Guatemala, gather water. However, EWB-USA University of Portland has now provided over 20 water collection tanks to help women spend less time gathering water for their families. This potable water harvesting system was started in January 2008.*



*EWB-USA Las Vegas Professionals Mike Sheffer and Anthony Deleon watch while a member of the volunteer labor force from Tsito Awudome, Volta Region, Ghana primes the hand pump well that was installed during their February 2009 trip. (Photo credit to Kosi Yinkah, director of DIVOG, local Ghana NGO).*



# MOVING FORWARD: EWB-USA PRINCIPLES AND STRATEGIES

The overall strategic outcome of EWB-USA is to accomplish EWB-USA's vision and mission while strengthening its position as a leader in the field of community development and transformational education. Having achieved such a leadership position, EWB-USA will become the first choice among engineering and technical organizations for partnerships in providing assistance to small, developing communities and a complement to university engineering education and life-long learning.

## GUIDING PRINCIPLES OF EWB-USA

EWB-USA has three guiding principles, or long-term competitive strategies, which act as an underlying framework in the fulfillment of its mission elements and differentiates EWB-USA from other service organizations, professional societies and academic institutions. These principles, along with the core values, guide the EWB-USA organization and ensures that as it moves forward, it continues to:

### 1 DELIVER SUSTAINABLE AND APPROPRIATE COMMUNITY PROJECTS

Great projects result in sustainable programs for the communities EWB-USA serves and utilize appropriate management processes and technologies in order to deliver best practices.

Great projects:

- Result in substantial improvement in the quality of life in the community.
- Can be readily operated, maintained, and repaired by members of that community.
- Maintain the health, safety, and security of all participants throughout the duration of the project.

### 2 PROVIDE TRANSFORMATIONAL EDUCATION

Great projects don't only deliver high value to the communities they are focused on; they also deliver exceptional educational experiences to those who participate. They bring excitement and value to EWB-USA member's work, and they encourage participa-





**EWB-USA members and partners report that participation in EWB-USA projects is a life-changing experience. For some, this means gaining an understanding of the profound level of poverty that exists in the world, and how engineering and related disciplines can make a positive difference in the lives of those who live in poverty.**

**[pictured] Motagua Bridge, Guatemala: Wisconsin Professionals by M Paddock**

Community members pass stones to be used to construct a temporary pier in the middle of Rio Motagua, Guatemala. The temporary pier was used to support wooden formwork trusses to build a 67' cast-in-place concrete T beam bridge. The bridge was completed and now has a bus route over it, allowing the community access to medical facilities, middle and high schools and the markets. (Photo by Mike Paddock, Wisconsin Professionals)

tion and drive membership. EWB-USA members and partners report that participation in EWB-USA projects is a life-changing experience. For some, this means gaining an understanding of the profound level of poverty that exists in the world, and how engineering and related disciplines can make a positive difference in the lives of those who live in poverty.

Others report gaining a deeper understanding about the practice of engineering, construction and operations, including the challenges of planning, design, financing, logistics, construction, commissioning and operations experienced through the life cycle of a project. Transformational educational experiences are also the result of working together in teams of students, faculty, professionals and members of the community.

### **3 PROVIDE OPPORTUNITIES FOR CONSTANT NETWORKING AND COMMUNICATION BETWEEN INVESTED PARTIES AS A MEANS FOR SHARING OF BEST PRACTICES**

Through the project delivery model, EWB-USA has formed a communications “hyper-network” which improves the EWB-USA experience by capturing and building upon the unique spirit and camaraderie that result from participating in the organization and its projects. This hyper-network connects members and partners so they can easily share knowledge, best practices and experiences, and so they can

**Through the project delivery model, EWB-USA has formed a communications “hyper-network” which improves the EWB-USA experience by capturing and building upon the unique spirit and camaraderie that result from participating in the organization and its projects.**

develop educational and career-oriented relationships in addition to friendships. EWB-USA will make it easier for members and partners to access information and connect with each other. And in times of urgency, the EWB-USA network will be able to call upon the talents of thousands of highly motivated, versatile, and capable people.

## **OPERATIONAL STRATEGIES**

There are organizational prerequisites (structure, processes, tools, talents, financial strength, relationships, alliances, etc.) that must be in place to achieve EWB-USA’s mission in alignment with its three guiding principles. EWB-USA has chosen four operational strategies complete with measurable objectives, tactics and key metrics to enable organizational strength building in accord with its current priorities and imperatives. To accomplish its mission and goals, EWB-USA will begin working towards fulfilling these operational strategies, as defined below:

### **1 BUILD AND DELIVER AN EFFECTIVE AND EFFICIENT INFRASTRUCTURE TO SUPPORT EWB-USA’S MISSION**

The structures and processes of EWB-USA were put in place upon the organization’s foundation in 2002. Today, updated structures, processes and tools are necessary to ensure a strong project delivery system and provide educational train-



ing for our members that ensure the quality of projects consistent with EWB-USA principles and values. The following objectives have been set in order to accomplish this strategy:

- Build and strengthen the project delivery system through a focus on project quality.
- Insure that the technologies and project delivery systems are appropriate and sustainable to the communities in which EWB-USA works.
- Insure the health, safety, and security of our members and our communities.
- Improve the skills and qualifications of EWB-USA members through a multi-topic and disciplined educational program that meets the priority needs of the members and the organization.
- Build a communications department and strategy to facilitate the development, dissemination and application of knowledge and resources through EWB-USA.
- Create fully integrated software systems which allow for the accumulation, storage, and sharing of EWB-USA information amongst its members.

## 2 RECRUIT AND RETAIN THE RIGHT PEOPLE

It is important to recruit, retain and develop members who are culturally aligned with the vision, mission, core values and guiding principles of EWB-USA. It is also important that service organizations, professional societies and donors with whom EWB-USA partners are also culturally aligned. The following objectives have been set in order to accomplish this strategy:

- Strengthen the volunteer governance bodies of EWB-USA by policy development, leveraging individual professional relationships, governance, oversight, education, and engaging in financial development strategic planning.
- Strengthen the staff of EWB-USA and improve the capacity and abilities to match the growth and development needs of the organization.
- Beyond the essentials of cultural alignment, members of governance bodies, national and regional staff, and project teams must pos-

sess and practice the skills, competence, and resource commitments required of their position to meet the needs of EWB-USA.

## 3 BUILD SUSTAINABLE FINANCIAL STRENGTH

EWB-USA must ensure that its revenue grows to match its organizational needs. The organization must ensure that its system of receiving, accounting and stewarding of revenue provides an open and transparent system by which the government, organization and donors are assured that funds are being expended in a prudent and ethical manner. The following objectives have been set in order to accomplish this strategy:

- Build and strengthen the development department's infrastructure and framework



CHILDREN FROM JALAMMA PALEM, INDIA ENJOY CLEAN WATER FROM THE PROTOTYPE SOLAR WATER STATION



CATHY LESLIE, EWB-USA'S EXECUTIVE DIRECTOR, VISITING THE WORKSITE DURING THE UNIVERSITY OF WISCONSIN-MADISON PROJECT IN RWANDA

such that it can build and maintain a substantial, robust, and diverse portfolio of contributors, supporters and advocates, commensurate with achieving our growth and development plans.

- Provide fundraising education for chapters to assist in maintaining a sustainable funding stream for their programs
- Build awareness of the organization within the general public and potential donors through marketing, advertising and media.
- Strengthen the business functions of EWB-USA so that the financial operation is conducted in accordance with Generally Accepted Accounting Principles and is available and transparent to the EWB-USA organization

- Manage the overhead of the organization to the target cited in the Annual Plan.

## 4 ATTRACT AND FOSTER EFFECTIVE PARTNERSHIPS

Attracting and fostering effective partnerships is essential to the success of EWB-USA. Collaborative partnerships not only assist in funding the organization, but also generate inspired valuable partners and ambassadors. The following objectives have been set in order to accomplish this strategy:

- Establish relationships with partner community leaders, community organizations and influential non-governmental organizations through the implementation of sustainable community programs.



*In July 2007, EWB-USA University of Washington chapter tests the new irrigation system they installed. Testing the system is the town leader, German Condori. (Photo by University of Washington)*

*Why we do what we do...  
(EWB-Central Houston Professionals)*



*In spring 2008, the EWB-USA Johnson Space Center chapter designed a "bring your own water treatment system" in Aguilar Mexico. The system treats bacterially contaminated surface water by passing it through gravel, rapid sand filters, and an ultraviolet disinfection system. (Photo by Evan Thomas, EWB-USA)*

- Build relationships with universities, industry, non-governmental organizations and governmental organizations to create a synergistic approach to community development. Build and maintain a stewardship program to engage potential partners including local communities, non-governmental organizations, industry, universities, members, donors and media.

The overall strategic outcome of EWB-USA is to accomplish EWB-USA's vision and mission while strengthening its position as a leader in the field of community development and transformational education. Having achieved such a leadership position, EWB-USA will become the first choice among engineering and technical organizations for partnerships in providing assistance to small, developing communities, and a complement to

university engineering education and life-long learning.

To do this, EWB-USA has developed the following objectives and tactics for the operational strategies mentioned above. By focusing on completion and continued evaluation of the objectives and tactics listed for each, EWB-USA will continue to ensure that as it moves forward, it will: deliver sustainable and appropriate community development programs across the globe and across technical expertise boundaries; provide transformational educational experiences which create an enriched life-long learning platform for EWB-USA's members and its communities; and build a multidisciplinary network of humanitarians which spans multiple generations, cultures, and technologies.

*In fall 2006, the EWB-USA Denver Professionals chapter enrolled the assistance of a local student, Willian Sacator, to help conduct water quality tests on the community's drinking and irrigation water supplies in Malinqua Pamba Ecuador.*



# STRATEGIES, OBJECTIVES, TACTICS AND METRICS

The overall strategic outcome of EWB-USA is to accomplish EWB-USA's vision and mission while strengthening its position as a leader in the field of community development and transformational education. Having achieved such a leadership position, EWB-USA will become the first choice among engineering and technical organizations for partnerships in providing assistance to small, developing communities, and a complement to university engineering education and life-long learning.

To do this, EWB-USA has developed objectives and tactics for the four operational strategies. By focusing on completion and continued evaluation of the objectives and tactics listed for each strategy, EWB-USA will continue to ensure that as it moves forward, it will: deliver sustainable and appropriate community development programs across the globe and across technical expertise boundaries; provide transformational educational experiences which create an enriched life-long learning platform for EWB-USA's members and its communities; and build a multidisciplinary network of humanitarians which spans multiple generations, cultures and technologies.

## STRATEGIES

- STRATEGY 1** Build and Deliver an Effective and Efficient Infrastructure to Support EWB-USA's Mission
- STRATEGY 2** Recruit and Retain the Right People
- STRATEGY 3** Build Sustainable Financial Strength
- STRATEGY 4** Attract and Foster Effective Partnerships





**The overall strategic outcome of EWB-USA is to accomplish EWB-USA’s vision and mission while strengthening its position as a leader in the field of community development and transformational education.**

[pictured] EWB-USA Utah State University in the Chijnaya community in the southern part of Peru Professor Steve Barfuss, Mitch Dabling, and Devin Stoker are shown taking flow measurements at a spigot within Chijnaya with a plastic water bottle and a stopwatch. Some homes were complaining about lack of pressure, so the team was trying to get a feel for how much flow they could get from various locations in the community. (Photo courtesy of EWB-USA Utah State University)

# STRATEGY 1 Build and Deliver an Effective and Efficient Infrastructure to Support EWB-USA's Mission

## OBJECTIVE Build and strengthen the project delivery system through a focus on project quality.

Tactics	Metrics
<ul style="list-style-type: none"> <li>Require compliance by all projects with EWB-USA's policies and procedures including: QA/QC system in which all projects are peer reviewed prior to construction.</li> <li>Maintain and enhance the Technical Advisory Committee (TAC) and its operation.</li> <li>Create a framework for long-term community plans for future sustainable development.</li> </ul>	<ul style="list-style-type: none"> <li>Annual number of projects successfully implemented and transitioned into sustainment.</li> <li>Benchmark increase in the number of projects that comply with all policies and procedures.</li> <li>Rate of project approval without major revisions (percentage).</li> <li>EWB-USA's project design and delivery process is rated by peer review (independent third party) as effective and efficient.</li> <li>Chapter and project team satisfaction of the process is high.</li> <li>Number of community long-term plans with at least one project in sustainment.</li> <li>Benchmark increase in the number of community plans being in place prior to second project.</li> <li>Benchmark increase in the number of satisfied communities.</li> <li>Benchmark increase in the number of community programs.</li> </ul>

## OBJECTIVE Ensure that the technologies and project delivery systems are appropriate and sustainable to the communities in which EWB-USA works.

Tactics	Metrics
<ul style="list-style-type: none"> <li>Implementation of a Monitoring and Evaluation Program.</li> </ul>	<ul style="list-style-type: none"> <li>Benchmark increase in the number of projects maintained by community (project acceptance).</li> <li>Benchmark increase in the number of projects done by the community that replicate the EWB-USA project.</li> </ul>

## OBJECTIVE Ensure the health and safety of the EWB-USA members and communities.

Tactics	Metrics
<ul style="list-style-type: none"> <li>Implement a Health and Safety Program for all Community Programs.</li> <li>Evaluate and manage the health, safety, operating, and legal risks of design and construction within developing communities.</li> </ul>	<ul style="list-style-type: none"> <li>Benchmark increase in the number of Health and Safety plans approved without revisions.</li> <li>Benchmark decrease in number of near misses.</li> <li>Benchmark decrease in number of incidents.</li> <li>Benchmark decrease in number of security incidents / evacuations.</li> <li>Benchmark increase in number of programs completed without incident.</li> </ul>

**OBJECTIVE** Improve the skills and qualifications of EWB-USA members through a multi-platform educational program.

Tactics	Metrics
<ul style="list-style-type: none"> <li>Implementation of a EWB-USA curriculum through a webinar series.</li> <li>Implementation of a certification system such that each travel member is fully qualified for travel.</li> <li>Implementation of a certification system to ensure that 100 percent of the EWB-USA mentors are appropriate.</li> <li>Within the means to ensure quality of the projects delivered and within the principles of sound development, increase the number of EWB-USA participants in community projects.</li> </ul>	<ul style="list-style-type: none"> <li>Benchmark increase in number of webinars held.</li> <li>Benchmark increase in number of webinar participants</li> <li>Benchmark increase in number of participants in a certification system.</li> <li>Benchmark increase in number of mentors certified</li> <li>Benchmark increase in number of satisfied customers</li> <li>Benchmark increase in number of participants.</li> </ul>

**OBJECTIVE** Build an education program to facilitate the development, dissemination, and application of knowledge and resources throughout EWB-USA.

Tactics	Metrics
<ul style="list-style-type: none"> <li>Implementation of web-based forums for country and technology sharing.</li> <li>Provision of resources for Faculty Advisors.</li> <li>Identification and approval of training partners.</li> </ul>	<ul style="list-style-type: none"> <li>Benchmark increase in number of web-based forums.</li> <li>Benchmark increase in number of resources.</li> <li>Benchmark increase in number of approved partners.</li> </ul>

**OBJECTIVE** Create fully integrated software systems which allow for the accumulation, storage and sharing of EWB-USA information.

Tactics	Metrics
<ul style="list-style-type: none"> <li>Implementation of a fully integrated system to identify and monitor membership and membership data.</li> <li>Enhancement of existing website to provide additional user requests, such as forums, etc.</li> <li>Implementation of a fully integrated system to accurately track and maintain information on projects.</li> </ul>	<ul style="list-style-type: none"> <li>Installation of association membership system.</li> <li>Benchmark increase in number of forums.</li> <li>Customer satisfaction survey.</li> <li>Benchmark increase in number of user requests.</li> <li>Deployment of project record system.</li> </ul>

# STRATEGY 2 **Recruit and Retain the Right People**

**OBJECTIVE** Build a general awareness of the organization by meeting all goals related to chapter development and branding initiatives stated in the strategic communication plan in order to educate EWB-USA members about EWB-USA.

Tactics	Metrics
<ul style="list-style-type: none"> <li>Implementation of a Branding Guide and guidance for chapters.</li> </ul>	<ul style="list-style-type: none"> <li>70 percent of established chapter Web sites using branding elements.</li> <li>90 percent of newly formed chapters using branding elements within 60 days.</li> </ul>

**OBJECTIVE** Strengthen the volunteer governance bodies of EWB-USA through policy governance and education.

Tactics	Metrics
<ul style="list-style-type: none"> <li>Implementation of Governance Policies.</li> <li>Definition of roles and responsibilities for all volunteer levels.</li> <li>Development of Success Planning for all volunteer bodies</li> <li>Implementation of training and orientation modules for different organizational elements.</li> <li>Implementation of Administrative Processes and Procedures.</li> </ul>	<ul style="list-style-type: none"> <li>Creation, maintenance and revisiting on annual basis of Board Governance Policies.</li> <li>Regional Structure in place with succession plans.</li> <li>Assessment of volunteer engagement at all levels.</li> <li>Type of volunteer diversity at all levels.</li> <li>Creation of National Finance and other policies.</li> </ul>

**OBJECTIVE** Strengthen the staff of EWB-USA and improve the capacity and abilities to match the growth and development needs of the organization.

Tactics	Metrics
<ul style="list-style-type: none"> <li>Provide fully defined roles and responsibilities of staff and relationships to volunteer bodies.</li> <li>Implementation of a Staff Development Program.</li> <li>Development of succession planning for staff turnover.</li> </ul>	<ul style="list-style-type: none"> <li>Job descriptions updated and consulted annually during year-end review process.</li> <li>Staff satisfaction survey administered annually.</li> <li>360 personnel reviews conducted annually before close of fiscal year.</li> </ul>



**[pictured] Children from the village of Vukuzeze are watching as Kettering University students Joy Jeyaratnam and Cori Snyder test stream water the children drink for dissolved oxygen levels. (EWB-USA Kettering University)**

# STRATEGY 3 Build Sustainable Financial Strength

**OBJECTIVE** Build and strengthen the development department's infrastructure and framework such that it can build and maintain a substantial, robust, and diverse portfolio of contributors, supporters and advocates, commensurate with our growth and development plans.

Tactics	Metrics
<ul style="list-style-type: none"><li>• Implementation of a five-year plan to achieve a more balanced and diversified funding stream from foundations, associations, individual donors, and corporations.</li><li>• Develop fundraising guidelines for local fundraising at the chapter level versus national fundraising.</li><li>• Set measurable goals per funding source.</li><li>• Stewardship programs are in place for all funding sources.</li><li>• Increase revenue stream from funding sources such that there is no operation financial constraints on program delivery.</li></ul>	<ul style="list-style-type: none"><li>• Increase in revenue and funding.</li><li>• Benchmark increase in the number of Supporters per Revenue Stream.</li><li>• Periodic assessments to ensure policies and procedures are in-line with industry best practices.</li><li>• Develop Positive Cash Flow Position for Entire Yearly Operation.</li><li>• Develop Operating Reserves by Year 5.</li><li>• Actual results versus measurable goals within the fundraising plan.</li></ul>

**OBJECTIVE** Provide fundraising education for chapters to assist in maintaining a sustainable funding stream for their programs.

Tactics	Metrics
<ul style="list-style-type: none"><li>• Develop and implement education tools, including presentations, webinars and trainings.</li></ul>	<ul style="list-style-type: none"><li>• Benchmark increase in funding raised by chapters.</li><li>• Number of fundraising tools for chapters.</li><li>• Number of chapter members trained.</li><li>• Number of webinars held.</li><li>• Chapter satisfaction survey.</li></ul>

**OBJECTIVE** Manage the infrastructure of the organization to the target cited in the Annual Plan

Tactics	Metrics
<ul style="list-style-type: none"> <li>Develop target overhead within the yearly Annual Plan.</li> </ul>	<ul style="list-style-type: none"> <li>Benchmark level of infrastructure as compared to other comparable NGOs.</li> </ul>

**OBJECTIVE** Strengthen the business functions of EWB-USA so that the financial operation is done in accordance with Generally Accepted Accounting Principles and is transparent to the EWB-USA organization.

Tactics	Metrics
<ul style="list-style-type: none"> <li>Implement National Financial Policies to clearly convey the expectations of the Accounting Function with EWB-USA. FASB standards followed.</li> </ul>	<ul style="list-style-type: none"> <li>Clean yearly audit.</li> </ul>

**OBJECTIVE** Build awareness of the organization within the general public and potential donors through marketing, advertising and media.

Tactics	Metrics
<ul style="list-style-type: none"> <li>Fundraising campaign – fundraising initiative collateral that persuades prospects and general public that EWB-USA is an effective investment in their values. The collateral may include brochures, emails and banner advertisements</li> <li>Development of a Media Kit – a collection of documents about EWB-USA that provide media with everything they need to know about the organization.</li> </ul>	<ul style="list-style-type: none"> <li>Name recognition has increased 10 percent in 12 months.</li> <li>Google analytics show that Web traffic to ewb-usa.org increased 10 percent.</li> <li>Executive Director/ Founder has been interviewed three times on national TV.</li> <li>EWB-USA has been profiled three times in national print media.</li> <li>EWB-USA has been featured two times in national on-line media.</li> </ul>

# STRATEGY 4 **Attract and Foster Effective Partnerships**

**OBJECTIVE** Establish community relationships through chapters, working relationships with partner community leaders, community organizations and influential non-governmental organizations.

Tactics	Metrics
<ul style="list-style-type: none"><li>• Implement a partnering guide to provide guidance to partners, communities and chapters with clarification of roles, responsibilities and expectations.</li><li>• Create a way for communities to contribute their knowledge to EWB-USA and its partners.</li></ul>	<ul style="list-style-type: none"><li>• Benchmark increase in the number of repeat partners.</li><li>• Administer a satisfaction survey.</li></ul>

**OBJECTIVE** Build relationships with universities to create a synergistic approach to community development by utilizing engineering curriculum and EWB-USA procedures.

Tactics	Metrics
<ul style="list-style-type: none"><li>• Work within the engineering curricula to incorporate additional skill-based learning within engineering curricula while utilizing EWB-USA for implementation.</li></ul>	<ul style="list-style-type: none"><li>• Benchmark increase in the number of university partnerships.</li></ul>

**OBJECTIVE** Build and maintain a stewardship program to communicate with potential partners who include local communities and NGOs, universities, members, corporate sponsors, donors, media, etc.

Tactics	Metrics
<ul style="list-style-type: none"><li>• Establish partnerships with engineering societies and associations to foster cross-discipline collaboration.</li><li>• Establish strong partnerships with other international aid agencies or NGOs.</li><li>• Establish strategic partnerships with key engineering and multi-national technology companies.</li></ul>	<ul style="list-style-type: none"><li>• Benchmark increase in the number of partnerships with engineering societies and associations.</li><li>• Benchmark increase in the number of partnerships with international aid agencies or NGOs.</li><li>• Benchmark increase in the number of partnerships with companies.</li></ul>



**[pictured] In Kipingi, Kenya the community fills their water containers and return home.**  
(Photo courtesy of EWB-USA Northern New Jersey Professionals, 2009)

# APPENDIX A

## WHERE WE STAND NOW: STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS

In order to effectively explain where EWB-USA stands in regard to the goals and strategies set forth by the organization, a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis was conducted. Its purpose is to identify, in the context of achieving the objectives, what the organization's strengths are, where the weaknesses lie, the opportunities that are available to EWB-USA, and the threats the organization may encounter.

	HELPFUL to achieving the objective	HARMFUL to achieving the objective
INTERNAL ORIGIN (attributes of the organization)	<p><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>• Name recognition</li> <li>• Mission aligns with prevailing cultural spirit</li> <li>• Long-term relationship building</li> <li>• Quick get/instant credibility in name and category</li> <li>• Increased corporate support and visibility</li> <li>• Growth rate/demand for membership</li> <li>• Healthy pipeline/organic demand</li> <li>• Professional partnerships that allow for mentorship</li> <li>• Motivated and vocal members</li> <li>• Member have strong academic talents</li> <li>• Direct positive impact on developing communities</li> <li>• Strong teamwork within national office</li> <li>• Strong accounting functions</li> </ul>	<p><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>• Name recognition</li> <li>• Brand consistency</li> <li>• Lack of crisis plan</li> <li>• Lack of accountability</li> <li>• High percent of funds restricted</li> <li>• Vulnerability to PR disaster because there is no crisis plan</li> <li>• Communication is difficult with communities until cultural and common understanding is reached</li> <li>• Effective communication is difficult to maintain with remote communities</li> <li>• Lack of long term implications and ability to measure program effectiveness (M&amp;E)</li> <li>• Traveling teams often do not have adequate cultural context</li> <li>• Students do not have directly related experience (either technology or international development)</li> <li>• Lack of ability to take on new chapters and programs</li> <li>• Inadequate training program to support unqualified volunteer base</li> <li>• Lack of membership, donor and project databases</li> </ul>

It is important to remember that every weakness can be transformed into a strength and that every threat is a veiled opportunity. For example, the lack of a monitoring and evaluation process, when addressed, further encourages the completion of EWB-USA's mission and allows EWB-USA to begin talking about where it would like to be in three to five years.

	HELPFUL to achieving the objective	HARMFUL to achieving the objective
EXTERNAL ORIGIN (attributes of the environment)	<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>• Seize 2010 as ideal window for growth/visibility</li> <li>• Use recent media attention as springboard</li> <li>• Raise profile by using high profile corporate sponsors and professional partner organizations; create co-branded communications</li> <li>• Make student members life-long advocates</li> <li>• Turn chapters into advocates for national by making national indispensable</li> <li>• Strong industry understanding that international aid is shifting towards more personal and localized delivery of aid to developing communities</li> <li>• Local NGOs have understanding and knowledge of commonly accepted development practices in community and country</li> </ul>	<p><b>THREATS</b></p> <ul style="list-style-type: none"> <li>• Student members vulnerable to attrition when they become professionals</li> <li>• Chapter attitude that national office is not necessary</li> <li>• Decrease in giving in nonprofit space</li> <li>• Capped growth will erode appeal to supporters</li> <li>• No way to identify international NGO partners' efficiency and/or reputation</li> <li>• General lack of understanding within universities regarding what international community development is and how it works</li> </ul>

# APPENDIX B

## **M**ONITORING AND EVALUATION OF THE STRATEGIC PLAN

This section of the strategic plan spells out the process by which the strategic plan is periodically and systematically reviewed to ensure its currency.

EWB-USA's vision and mission will continue to guide the organization for years into the future. However, the organization's strategy for achieving its mission must be responsive to the environment in which the organization operates. A strategic plan is a dynamic document that must continue to be modified to reflect not only EWB-USA's external environment but the organization's internal environment as well. Changing external factors demand a shift in organization priorities and resources while external factors such as funding impact the organization's ability to respond to opportunities and threats from the outside.

Review of the strategic plan will occur via several venues. First, as part of the board's governing process, the Executive Director is required to report to the board on achievement of the organization's ends. The means to achieve these ends is the strategic plan. This process will provide both staff and board with a picture of the organization's ability to achieve the strategic plan and will suggest necessary adjustments in resources and/or priorities. The organization's proposed budget submitted to the board will reflect these modifications.

Reviewing the strategic plan annually in light of its implementation must be augmented by a broader review of the underlying assumptions of the plan, a review of the perceived external threats and opportunities and the organization's internal strengths and weaknesses. This high level review may lead to new strategies to respond to these new external and internal factors.

Determination of the need for this high-level, periodic review will be addressed by the board no less than once every two years. The board will determine whether a review is needed and if needed, the process and timing of the review.

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