



REPORT OF 2016 PROJECTS FUNDED BY IEEE HUMANITARIAN ACTIVITIES COMMITTEE (HAC)

JUNE 2017

IEEE

MISSION

IEEE fosters technological innovation and excellence for the benefit of humanity.

STRATEGIC GOAL

2015-2010: IEEE will lead humanitarian efforts around the world to use technology to solve the world's most challenging problems.

IEEE HAC

MISSION

The IEEE HAC supports the IEEE Board-endorsed vision of IEEE volunteers around the world carrying out and/or supporting impactful humanitarian activities on the local level.

"Local" is defined by the fact that one or more key IEEE leaders of the project are citizens and/or permanent residents of the country in which the project is to take place.

VISION

IEEE will possess a large network of volunteers around the world carrying out and/or supporting impactful humanitarian activities on the local level.

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MESSAGE FROM THE IEEE HAC CHAIR



LAURA EDELSON

Chair, IEEE Humanitarian Activities Committee (HAC)

2016 was the first year of regular operations for IEEE's Humanitarian Activities Committee (HAC), and I could not be more proud of the work the committee accomplished and the projects we funded. The funding of IEEE member-led projects is the most direct way we have of "Advancing Technology For Humanity."

This assessment report also shows the incredible geographic breadth and technical range of the IEEE membership. From solar projects in Nepalese villages to information and communication technology (ICT) projects in African health clinics, IEEE members are everywhere!

This report covers only projects funded by the HAC through our project grants. There are many other projects being directly funded by other IEEE humanitarian groups, such as IEEE Smart Village, or geographic or technical organizational units (OUs), such as IEEE-USA and the Power and Energy Society. Therefore, please consider this a look at only a small percentage of the global development and humanitarian work done by IEEE members.

I'm deeply inspired by this small glimpse into the many ways IEEE members give back to their communities and are a force for good in the world; I hope you will be as well.

Sincerely,

A handwritten signature in cursive script that reads "L Edelson".

Laura Edelson
Chair, IEEE HAC

EXECUTIVE SUMMARY

In 2016, the IEEE Humanitarian Activities Committee (HAC) approved US\$268,836 in funding for five projects: solar energy systems for earthquake victims in Nepal; a mobile app for the homeless in the United States; low-cost rechargeable headlamps for farmers in India; ICT infrastructure and digital literacy training for rural healthcare centers in three African countries; and a green energy training center in Haiti.

This first annual report provides an assessment of each project, reviews the intent informing funding decisions, how the HAC Projects Subcommittee evaluates grant projects, and key program parameters. The report concludes with lesson learned and recommendations to further strengthen project assessment and evaluation for the 2017 and 2018 grant cycles. The goal is to continuously improve the assessment process and reporting, along with strengthening the support provided to HAC funded projects.

The intent in generating an annual HAC grants report is to dedicate time to review and improve the impact of IEEE's investment in sustainable development and humanitarian technology programs. The lessons learned and recommendations shared in this review can also be applied to the broader community of engineers and technical professionals engaged in sustainable development.

KEY FINDINGS

- Grantees struggled with delays caused by a number of unforeseen issues, including natural disaster, third-party approval, and delays in receiving access to IEEE funding.
- Most of these projects, like the UN Sustainable Development Goals (SDGs), are longitudinal in nature, making assessment of project outcomes within a

- one-year grant cycle challenging.
- Grantees expressed uncertainty about the financial sustainability of their projects past the one-year grant cycle.

RECOMMENDATIONS

- The HAC needs to regularly reassess its goals for the grant program to clarify what the committee aims to achieve and how it intends to measure and monitor progress.
- The grant application and project assessment processes must be aligned to support and monitor grantees' short-term outputs and expected long-term outcomes.
- The HAC should clearly articulate its expectations of grantees by producing a lexicon of terminology and tools it will use to evaluate prospective projects and understand the impact of its funding.

The community of engineering and technical professionals can provide immeasurable value to the sustainable development and humanitarian technology sectors by generating case studies, such as the five HAC granted projects below, that demonstrate the role and contribution of engineering and technical proficiency in solving global challenges.



End user survey with Essmart headlamp prototype, India

REPORT OVERVIEW

BACKGROUND TO PROJECT FUNDING

The HAC provides funding to support local IEEE volunteers providing solutions to community challenges they identified in consultation with local end-user communities. The HAC Projects Subcommittee reviews proposals up to three times a year and grants awards between US \$20,000 and US \$100,000 to selected projects. Project grants in 2016 ranged between US \$20,000 and US \$87,500.

In 2016, the HAC prioritized supporting direct project costs, such as equipment, materials, supplies, and travel, of sustainable development and humanitarian technology projects taking a holistic approach towards addressing community challenges in partnership with local stakeholders. To be

considered for funding, project proposals must be aligned with HAC's vision, benefit and engage an underserved community, have meaningful IEEE volunteer and local community involvement, focus on sustainability of project results, and include a technology component, thus leveraging IEEE's core competencies.

In addition, proposals are evaluated based on a list of criteria defined by HAC in reference to its Monitoring and Evaluation Parameters. The proposal evaluation criteria are regularly reviewed by the HAC Projects Subcommittee and continue to evolve based on international good practices.

MONITORING & EVALUATION PARAMETERS

In 2016, the HAC identified three priority parameters for assessment: Impact, Sustainability, and Scalability. The parameters help assess the success of a project within a defined context and scope, from its initial intent to its potential for site-specific scaling. In the context of IEEE, scalability is the opportunity for adaptation and replication of a project and/or its components to other contexts through IEEE's far-reaching global network of engineers and technical professionals.

This report addresses the three parameters for each of the five projects assessed. It should be noted that grantees address each parameter in accordance with what makes sense for their project. The HAC Assessment Subcommittee

has defined the parameters as the following:

IMPACT

An understanding of:

- Whether the project meets its immediate target outputs within the grant period
- The potential long-term outcomes of their activities

SUSTAINABILITY

An understanding of:

- Whether the project as executed is socially accepted and adopted within the target beneficiary community
- The ecological effects of the solution on the community and the planet at large
- The conditions required to establish a sustainable solution (for example, gender

- considerations, needed policy shifts, etc.)
- Whether the project can continue without external financial dependencies

SCALABILITY

An understanding of:

- Whether a project can be adapted and replicated in other communities around the world
- The global size of the problem addressed

and how feasible it is for the proposed solution to scale to meet the identified challenge

- The conditions required to be a scalable solution

It is expected that these parameters will continue to adapt over time as the HAC projects grant program continues to evolve.

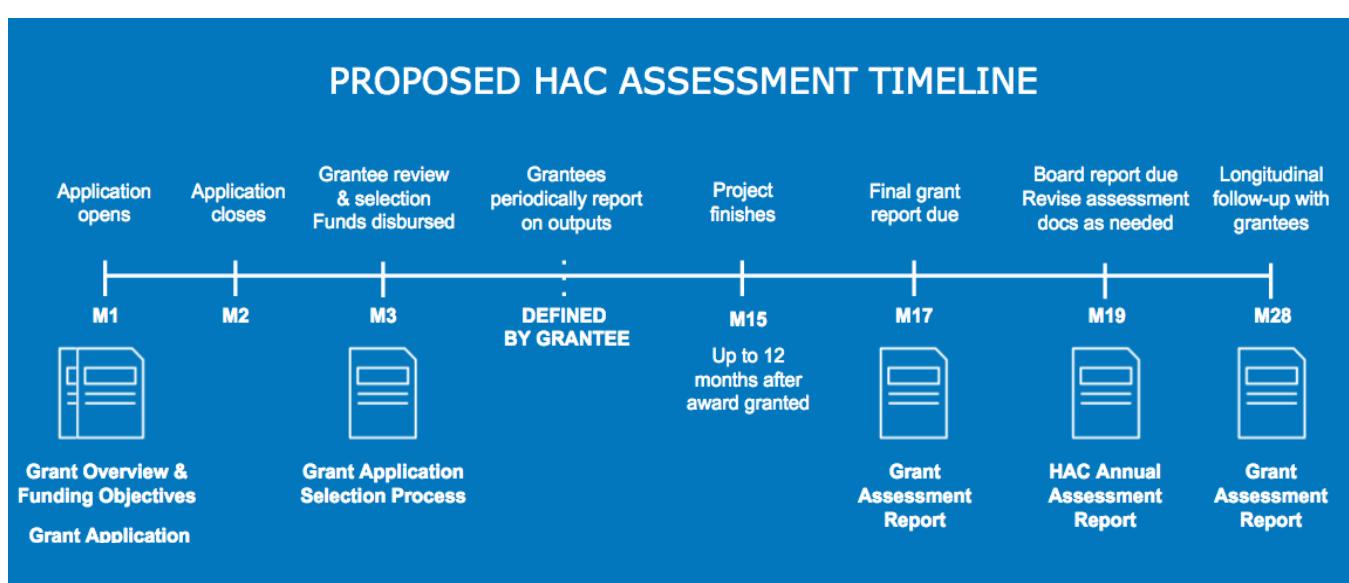
PROJECT ASSESSMENT OVERVIEW

The assessment content shared in this report was generated by HAC's five 2016 grantees. The assessment is self-reported, with grantees providing a written report and invoices to prove how funding was used. As a committee, the HAC regularly reviews its application vetting and reporting systems so that it can better understand and quantify the impact of the IEEE Board's investments.

To this end, the HAC Assessment Subcommittee has diligently reviewed each assessment report, consulted a monitoring and evaluation specialist, and summarized findings in the Lessons Learned and Good Practices section (pg. 15) of this report. The committee's

intent is to annually review how HAC grant money is applied so that it can appropriately evolve and further strengthen the grant application and reporting requirements.

For 2017, the committee has secured approval to allow grantees to spend grants for up to twelve months after their disbursement. A recommendation has been made to add a longitudinal follow-up with grantees to the project assessment, which is further discussed in the Lessons Learned and Good Practices section. See *Proposed HAC Assessment Timeline* below for an overview of the HAC assessment framework.



PROJECT 1

NEPAL EARTHQUAKE REHABILITATION PROJECT - SOLAR ELECTRIFICATION

Organization: IEEE Nepal

Website: n/a

Location: Simigaun Village, Dolakha, Nepal

Project Leads: Rajnish Gupta, Arun Timalsina

Amount Awarded: US\$29,542

Hours Spent: 720 hours

DESCRIPTION

The twin earthquakes of April and May 2015 devastated a large part of Nepal, with some of the greatest damage in its central regions of the Sindhupalchok, Gorkha, and Dolakha districts. IEEE Nepal volunteers working in rebuilding efforts in these regions noticed that one of the biggest problems was the lack of light at night.

After distributing donated solar lanterns, the IEEE Nepal group proposed a solar electrification project in collaboration with the Upper Tamakoshi Hydro Project (UTKHPL), many of whom are IEEE members. The UTKHPL was to repair the existing electricity distribution network and the IEEE Nepal Unit would contract a firm to set up a solar system.



Transporting of the solar panels to Simigaun, Nepal

IMPACT

OUTPUTS

- **PROPOSED:** The project was initially planned for two villages, that of Simigaun and Beding. UTKHPL engineers agreed to repair the existing electricity distribution network, a hydro-power plant, and the IEEE Nepal Unit would contract a firm to set up a solar system that would provide electricity.
- **ACHIEVED:** The repair of the hydro-power plant and the solar electrification of 120 households was completed. However, due to financial constraints, the project scope had to be limited to the village of Simigaun.

OUTCOMES

- **SHORT-TERM:** Access to electricity to 120+ households in Simigaun.
- **LONG-TERM:** Electricity will increase tourist traffic in the village located on the popular Rolwaling Trekking route, which is a major source of income to the local Sherpa community. Since the village does not fall under the Nepal Electricity Authority it is unlikely to be connected to the grid in the near future. It is too early to measure the impact on the villagers' livelihoods.

OBSTACLES

- The delay in physical rehabilitation of the earthquake victims.
- Political issues near the India-Nepal border, which complicated the transport of equipment.



SUSTAINABILITY

- **LOCATION:** The Simigaun village was chosen because of its location on a trekking route most affected by the earthquake and because it is known to the engineers of the UTKHPL. The fact that the village is located on this famous trekking route will help secure its longevity.
- **MAINTENANCE:** The Electricity Users Association (EUA) formed under the Gauri Shankar Village Development Committee (GSVDC), a local government body, will manage day-to-day operations, with fixed fees for use of the solar electricity. IEEE members at UTKHPL and Peak Power will be strong technical partners to support maintenance at tertiary level. The EUA will collect the equivalent of US\$1 per-household per-month fee for operating and maintaining the project. With electricity, households can sell a camera-and-phone-charging service to tourists and trekkers to generate the earnings to pay for this fee.
- **NEXT STEPS:** For continued IEEE engagement, the unit will organize a yearly project site visit with camping for new IEEE student members. This will be an educational trip as well as a way to monitor and correct any issues in the supply system.

SCALABILITY

- **INFRASTRUCTURE:** The project demonstrates the ability to scale within the village and beyond because a functioning infrastructure now exists for further distribution of the solar energy within the village and other villages in the area.
- **PARTNERSHIPS:** The partnerships with EUA and UTKHPL will allow for timely maintenance of the hydro-power plant, solar panels, and distribution systems in the area. A partnership with GSVDC will support the local collaboration with the village. And finally, a local primary school in Simigaun is setting an example for schools to follow suit in making use of the solar electrification.

	Proposed	Actual
IEEE Members	15	25
Community Partners	3	3
Volunteers	20	40

*All numbers are self-reported by grantees.
Community partners may include institutions and/or individuals.*

HOPE ONE SOURCE

Organization: Hope With Love (HWL)

Website: hopewithlove.org / hopeonesource.org

Location: Washington DC, USA

Project Lead: Anthony Glynn

Amount Awarded: US\$20,000

Hours Spent: over 1,000 hours

DESCRIPTION

A nation-wide lack of affordable housing and the limited number of assistance programs have put many in the USA in risk of homelessness. Even when resources are available, they are often inaccessible to those in need. People experiencing homelessness face many challenges, further complicated their ability to escape the vicious cycle.

Hope With Love's mission is to help prevent and end homelessness in Washington, D.C. and beyond. The HopeOneSource (HOS) tool enables social and career service providers to directly and securely connect with target demographics they aim to help. Using the tool, verified service providers are able to connect local services directly to the phones of those in need via text alerts.



IMPACT

OUTPUTS

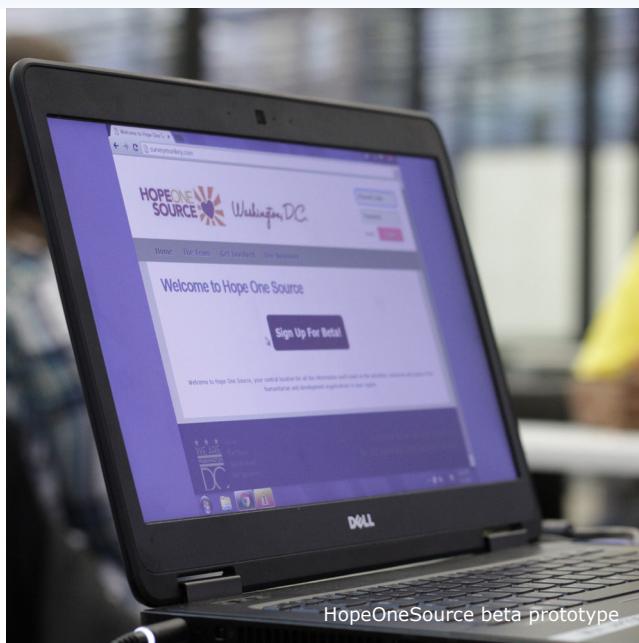
- PROPOSED: Increase access to services for at-risk and homeless people in D.C. by elevating the number of those registered to receive text alerts of nearby services and the number of service providers posting messages of available services.
- ACHIEVED: A 300% increase in access to services was achieved from the previous year by increasing the number of homeless registered to receive text alerts from 150 to 585. The project also increased the number of messages sent by service providers about local services from 12 to 111, an 825% increase from May 2016 to May 2017.

OUTCOMES

- HOS has established itself as a program that can significantly aid local efforts to help end homelessness and prevent those at-risk from becoming homeless.

OBSTACLES

- Unanticipated SMS Short Code approval delays.
- Delay in receiving the grant money, delaying the ability to apply for approval for four months.
- Combination of delays meant the project was unable to reach the unfunded goal of conducting data with outcomes from a statistically accurate sample of the tool's beneficiaries—those experiencing homelessness and the service providers.



SUSTAINABILITY

- PARTNERSHIPS:** Cisco Systems has provided a 30% discount with the cellular carriers for each inbound and outbound text messaging cost for the next three years, while a Lifeline government assistance has agreed to provide compensation to offset some of the system's operational costs for the distribution of free phones.
- UPDATE RELEASES:** The HOS system has many more improved features. However, since the app world is ever-changing there will be additional costs related to making complex yet necessary usability upgrades in a timely manner.
- NEXT STEPS:** The lifetime of the project is forever. HOS' pilot from September 2015 to March 2017 has demonstrated that it can make homelessness rare, brief, and non-recurring. Moving into phase 2 of the program, HOS will continue to leverage existing community and volunteer resources, minimizing external resources required for operation to ensure the cost-efficient expansion of HOS in communities beyond the Washington, D.C area.

SCALABILITY

- COMMUNITY SUPPORT:** Civic leaders are already talking about its use in other cities.
- PLANS FOR GROWTH:** "Having the HopeOneSource tool helps us navigate the nuances of how we deliver services [in D.C.] and how those who need them can access them," says Odie Donald, Executive Director, D.C. Workforce Investment Council, "we want to scale this thing."
- PARTNERSHIPS:** HOS' partnership with D.C. Business Improvement District (BID) has helped register new clients.
- The Safelink Wireless partnership will connect those at-risk and experiencing homelessness in D.C. who cannot afford a phone with one. They are committed to growing with HOS and can provide financial assistance as well.

	People Engaged	Proposed	Actual
IEEE Members	1	1	
Community Partners	12	111	
Volunteers	5	28	

*All numbers are self-reported by grantees.
Community partners may include institutions and/or individuals.*

PROJECT 3

LOW-COST RECHARGEABLE HEADLAMP FOR RURAL INDIAN FARMERS

Organization: Essmart

Website: www.essmart-global.com

Location: Rural Tamil Nadu, India

Project Lead: Jackie Stenson

Amount Awarded: US\$65,804

Hours Spent: 500 hours

DESCRIPTION

Due to the hot climate, most of farming work in South India is conducted in low-light settings (before sunrise or after sunset). Rural farming communities in Tamil Nadu, India, have asked for an affordable, durable, rechargeable, and hands-free light source.

Essmart, a social enterprise, is working with local IEEE chapters to co-design a low-cost, rechargeable headlamp for rural farmers. This project tested the existing prototype, refined the design, and set up a manufacturing supply chain so that the headlamp could be produced at scale and disseminated through Essmart's network, enabling rural farmers to work more safely and more efficiently.



Shop owner testing headlamp prototype, India

IMPACT

OUTPUTS

- PROPOSED: Disseminate 1,000 headlamps to rural Indian farmers via Essmart's network
- ACHIEVED: Established production capacity for 2,000 headlamps of lower and higher brightness setting. The two models enabled Essmart to assess end user preferences of cost vs. brightness using market feedback. All the components have been procured and production for units has started. Dissemination held up for several months by component with a slow lead time.

OUTCOMES

- Provide an affordable, hands-free light source that helps farmers and others work more efficiently and safely.

OBSTACLES

- Experienced delay in fund dispersal because of trouble with the OU acting as the fiscal agent since dispersal could not be received directly due to Steering Committee meetings. Until first funds came through in October, it was difficult to move ahead since funds were unavailable.
- Initial metal PCBs samples sourced in India were of extremely poor quality, so a better supplier had to be sourced, contributing to the overall delays.
- After a quality and affordable plastic molder was found, the project experienced manufacturing and technical delays due to extremely slow production.



SUSTAINABILITY

Should Essmart see successful uptake and user adoption of the headlamp, it will confidently continue manufacturing and distributing thereof, ensuring its contingency.

- **COMMUNITY PARTNERS:** The community was chosen because Essmart has worked there regularly and for the past three years members have actively requested a low-cost rechargeable headlamp from Essmart. The community was actively involved in designing the headlamp and testing the first two prototype iterations. The pilot phase involved building multiple prototypes and getting feedback from the community, in terms of technical specifications and branding.
- **PRODUCT DEVELOPMENT:** If successful, Essmart will conduct regularly scheduled upgrades to the design and technology as well as potential new model developments based on end user feedback.
- **PRODUCT LIFE:** It is hard to estimate this until after headlamps are disseminated.
- **COST:** Essmart has achieved the target cost for manufacturing. Should Essmart make large purchase orders from the shops in Essmart's network, all costs will be covered of continuing to manufacture and disseminate the headlamp.

SCALABILITY

- **DESIGN:** The headlamps are designed to be manufactured at scale and thus be easily disseminated through Essmart's last-mile distribution network or beyond.
- **DISTRIBUTION:** Essmart continues to grow its last-mile distribution network
- **PARTNERSHIPS:** Essmart started building relationships with major climbing and outdoor companies in India, including Wildcraft and Gipfel. This would enable manufacturing at larger scale and reduce overall production costs, and thus reduce the retail price for the target rural community.
- **NEXT STEPS:** Assessment of scalability after the first assembly run and round of product dissemination.

	Proposed	Actual
IEEE Members	4	4
Community Partners *	1	1
Volunteers **	30	30

* Essmart—works with 400 rural retail shops and rural communities in 9 districts in Tamil Nadu

** Electrical and mechanical engineer, students, and Essmart staff

PROJECT 4

STRENGTHENING HEALTHCARE DELIVERY IN ETHIOPIA, KENYA, AND MALAWI

Organization: IEEE Society on Social Implications of Technology (SSIT) IST-Africa SIGHT

Website: www.ieeessit.org

Location: Peri-urban, rural and deep rural healthcare clinics in Ethiopia, Kenya, and Malawi

Project Lead: Paul M Cunningham

Amount Awarded: US\$65,990

Hours Spent: 600 hours

DESCRIPTION

The IEEE SSIT IST-Africa SIGHT is focused on building sustainable, cross-border volunteer activities in IST-Africa Partner Countries. Addressing end-user community needs in healthcare, education, energy, and food security, IEEE members and other volunteers focus on establishing long-term interventions involving university staff and students in consultation with relevant stakeholders.

This phase is focused on strengthening infrastructure and digital literacy in peri-urban, rural, and deep rural healthcare clinics participating in the co-design and validation of mHealth4Afrika, an open source, multilingual platform for low-resource areas, supported by the European Commission under Horizon 2020.



IMPACT

OUTPUTS

- PROPOSED & ACHIEVED: Procurement and installation of necessary ICT equipment and infrastructure for nine healthcare clinics, along with digital literacy and maintenance training and support for clinic staff. A volunteer coordination meeting in Kenya to plan ongoing cross-border activities in Ethiopia, Malawi, Kenya, and South Africa.

OUTCOMES

- SHORT-TERM: The introduction of basic ICT infrastructure, digital literacy, and preventative maintenance training and support in the nine beneficiary clinics will make a significant difference to operational capacity and further strengthen the quality and consistency of primary healthcare delivery.
- LONG-TERM: Build a long-term relationship between the local community (including healthcare workers) and university staff and post-graduate students, support wider take-up of digital literacy skills, along with establishing and strengthening research cooperation, local entrepreneurship, and primary healthcare outcomes.

OBSTACLES

- Significant time to secure grant approval and receive funds, leaving three months for equipment selection.
- Identifying a Section that could receive the funds and currency risks following transfer to the Section.



SUSTAINABILITY

- BACKGROUND:** In Q4 2015, the HAC provided a travel grant to support undertaking an infrastructure assessment of thirteen healthcare clinics in Ethiopia, Kenya, Malawi, and South Africa, selected in consultation with partner universities and Ministries of Health. This assessment provided insights into deficits related to computer literacy levels, equipment, and infrastructure. In Q3 2016, the HAC provided a grant towards basic ICT equipment for nine clinics in Ethiopia, Kenya, and Malawi.
- PROJECT LIFETIME:** This is the start of a long-term engagement with Ministries of Health and participating clinics, based on a model of local university post-graduate students and staff providing ongoing training, support, and maintenance. Additional resources will be required to cover necessary travel-related expenses and to maintain, extend, and replace initial equipment now being installed.
- NEXT STEPS:** The medium to long term vision is to incrementally expand the number of clinics supported and extend the breadth of healthcare, education, energy, and food security related activities with schools located near participating clinics.

SCALABILITY

- PARTNERSHIPS:** Through SSIT IST-Africa SIGHT members, the project involves post-graduate student volunteers from the University of Gondar, Strathmore University, Chancellor College, University of Malawi, and Nelson Mandela University.
- NEXT STEPS:** This model is designed for national replication and scaling, initially in Ethiopia, Kenya, Malawi, and South Africa and later in other IST-Africa partner countries. A standardized approach is being implemented across each partner country with infrastructural, socio-cultural and socio-economic adaptations to facilitate cross-border coordination and knowledge sharing between key stakeholders and in support of a sustainable volunteer culture.

People Engaged	Proposed	Actual
IEEE Members	6	6
Community Partners*	13	13
Volunteers**	10	10
Participating Clinic Staff	45	136

* National Ministries of Health, national IST-Africa partners and local healthcare clinics in Ethiopia, Kenya, Malawi, and South Africa

** University staff and post-graduate students (computer science and electrical engineering)

PROJECT 5

GREEN ENERGY TRAINING CENTER IN SOUTHWEST HAITI

Organization: Green Energy for Côteaux (GEC)

Website: n/a

Location: Côteaux, Côte Sud, Haiti

Project Lead: Alan Mickelson

Amount Awarded: US\$87,500

Hours Spent: 500 hours

DESCRIPTION

Access to electricity is very limited across Haiti, especially in the far southwest of the country, Côte Sud. L'Institut Technique de la Côte Sud (ITCS) is a privately funded vocational training center in Côteaux where local Haitians are taught practical technical skills in order to support a diversifying technical economy. ITCS began operation in August 2016 and currently has some 35 students enrolled in various technical programs.

In support of the ITCS, student teams from the University of Colorado Boulder and Arizona State University set out to design a photovoltaic system to provide for daily electrical needs while also serving as a hands-on teaching asset to the growing institute.



IMPACT

OUTPUTS

- PROPOSED: The installation of a 10 kW solar system with a controller for a lithium ferro phosphate battery pack system at the ITCS.
- ACHIEVED: The installation of a 1.5 kW solar system at the ITCS followed by an installation of a 12.5 kW system in June 2017. The staggered installation was due to structural damage caused by Category 5 hurricane Matthew that hit the area in October 2016.

OUTCOMES

- LONG-TERM: Increased enrollment at the ITCS through decreased tuition achieved by switching from diesel fuel to renewable, solar energy. The modular system would also provide students with improved, hands-on training during their two-year program at ITCS.

OBSTACLES

- The Category 5 hurricane Matthew devastated Southwest Haiti in October 2016, with the eye passing just to the west of Côteaux, scene of the training center. Structural damage caused by the hurricane had to be addressed before an installation was possible.



SUSTAINABILITY

- **CONTINGENCY:** The fact that the institute has already been around as a community project for several years before opening its doors is indicative that it will continue to operate. However, its Green Energy Training Center is currently still in pilot phase, so its contingency is uncertain. If the Center does continue, the ITCS will need the photo-voltaic system for both power and as a training tool.
- **PUBLICATION:** An abstract was submitted to the 2017 Global Humanitarian Technology Conference to present the idea of using solar systems as training tools.

SCALABILITY

- **PARTNERSHIPS:** The project organizers are in touch with Ti Soley, the SIGHT group in Port-au-Prince, to explore a partnership that might enable the project's continuation and possible scaling after its completion.

	People Engaged	Proposed	Actual
IEEE Members	10	10	10
Community Partners	10	20	20
Volunteers	20	25	25

*All numbers are self-reported by grantees.
Community partners may include institutions and/or individuals.*

LESSONS LEARNED AND GOOD PRACTICES

The HAC Assessment Subcommittee worked with consultants to review each grantee assessment report to consider how to further strengthen its application and assessment processes to achieve its impact goals. This exercise included a review by the Subcommittee of how similar institutions evaluate grant programs and their impact.

Based on this research, it is recommended that the Assessment Subcommittee undertake the following activities in 2017 to improve assessment:

1. REVIEW THE IMPACT GOALS OF THE HAC

The HAC currently provides grants to individuals and groups around the globe who are implementing technology solutions for a variety of challenges. As a result, the outputs and outcomes of each program vary widely. The committee can continuously strengthen its story of impact by ongoing reviews of the successes and failures of these programs to better understand what types of projects should be prioritized for funding and the level of support required to maximize impact.

2. ALIGN THE PROJECT APPLICATION WITH PROJECT ASSESSMENT

All stakeholders (project teams, HAC Project Subcommittee, HAC Assessment Subcommittee, and IEEE HAC staff) would benefit from a standardized framework that improves the planning, implementation, management, monitoring, evaluation, and reporting of projects. A framework such as the Logical Framework Analysis (LFA), which uses the Log Frame to capture critical project parameters, such as objectives,

goals, activities, resources, and indicators in a uniform, structured manner, would make the end-to-end process easier and clearer to all project stakeholders. It is strongly recommended that the HAC adopts the LFA or a similar framework.

3. CREATE HAC GRANT PROGRAM LEXICON

In 2016, grantees interpreted the HAC parameters (Impact, Sustainability, and Scalability) according to their unique projects. However, the varying definitions sometimes did not help the HAC understand its impact or align with standard evaluation terminology in the sustainable development sector. As the committee reviews its parameters and introduces new tools for grantees, both would benefit from the publication of a shared lexicon that defines HAC expectations for reporting impact as well as sensitizes prospective grantees to standard terminology used in the sustainable development sector.

4. LONGITUDINAL FOLLOW-UP WITH GRANTEEES

Since it is too early to draw meaningful insights in terms of impact from the funded projects, a follow-up with the grantees is needed. This would allow the HAC to assess the actual significance of the work over a longer time horizon. Future grant agreements with grantees should include two assessment periods, the first due within two months after project completion and the second due twelve months after project completion. Both will report on qualifying questions regarding the three Monitoring and Evaluation Parameters as defined in the Report Overview section.



Bridge crossing over turbulent waters to Simigaun, Nepal

THIS REPORT WAS PUBLISHED BY
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