

Building a locally-focused community of Engineers for global development

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Chair, IEEE SIGHT Steering Committee

IEEE SIGHT

Special Interest Group on
Humanitarian Technology

Imagine

What could happen if 1/2 million engineers around the world applied their skills to help local underserved communities?

Imagine

IEEE SIGHT

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Special Interest Group on Humanitarian Technology

SIGHT is network of IEEE volunteers around the globe that partner with underserved communities and local organizations to leverage technology for sustainable development.

What is IEEE SIGHT?

Vision

Underserved communities around the world are able to benefit from technology as they seek sustainable solutions to development challenges.

Mission

The Special Interest Group on Humanitarian Technology (SIGHT) program is a network of IEEE volunteers around the globe that partner with underserved communities and local organizations to leverage technology for sustainable development.



Where are SIGHT Groups?

85 Groups in 29 Countries and 5 Societies



What is a SIGHT Group?

A group of at least 6 IEEE members (*additional IEEE and non-IEEE volunteers are welcome*) who come together to

- (1) learn about sustainable development,
- (2) build relationships with local underserved communities and,
- (3) implement projects that leverage technology to tackle key problem within the community.

Photo: Artisanal Fishers SIGHT, India

SIGHT Group Expectations

I. SIGHT Project

groups must work on a local 'feet on the ground' project

II. Humanitarian Training & Professional Development

volunteers should gain a foundational understanding of sustainable development and proficiency in project-specific areas

III. SIGHT Group Capacity Building

groups work to build their capacity through partnerships and other resources

IV. Annual Report

groups complete self-assessment and must submit an annual report to IEEE

Types of SIGHT Groups

Professional SIGHT Groups

- Sponsored by a society, section, council or region
- Engage in long-term projects with the community

University SIGHT Groups

- Sponsored by a student branch
- Require a faculty lead
- Engage in a “feet on the ground” project with the community

SIGHT Project Types



WHAT IS/ISN'T
A SIGHT GROUP
PROJECT?

SIGHT Projects Types



1. Technology **deployment** in an underserved community
2. Humanitarian technology **development**
3. Technology related **policy** project

Customized Technology Deployment

Impact



Deploy and support
(Deep Sea Fishers SIGHT)

Deploy
and Done



Local Enterprise
collaboration
(Bangladesh SIGHT)

Level of Engagement



Technology Development

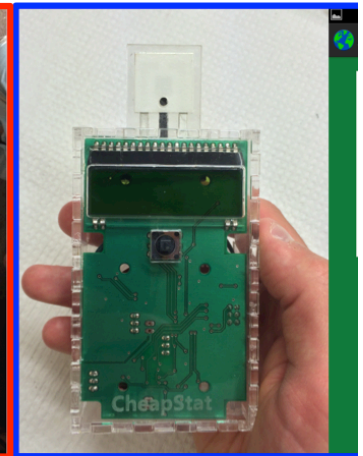
Direct Impact



Prototype with beneficiary



Water collected and measured in India AquaSift plat



Research and Opensource – Santa Clara SIGHT’s android arsenic sensors.



Prototype – Madras SIGHT Solar Lamp Development

Level of Engagement



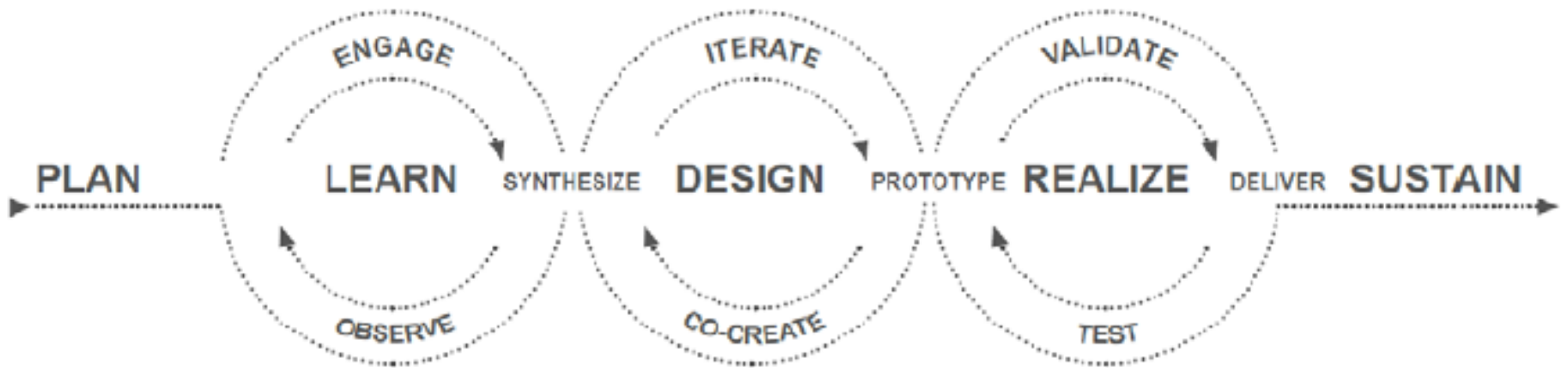
Funding and Resources

- Project Seed Funding 500\$ - 20K\$
 - 3 Cycles (15th of Feb, May, August)
- Large-scale funding upto 100K\$
- Conference participation support
- Annual Rebates
- Events and Capacity Building Activities

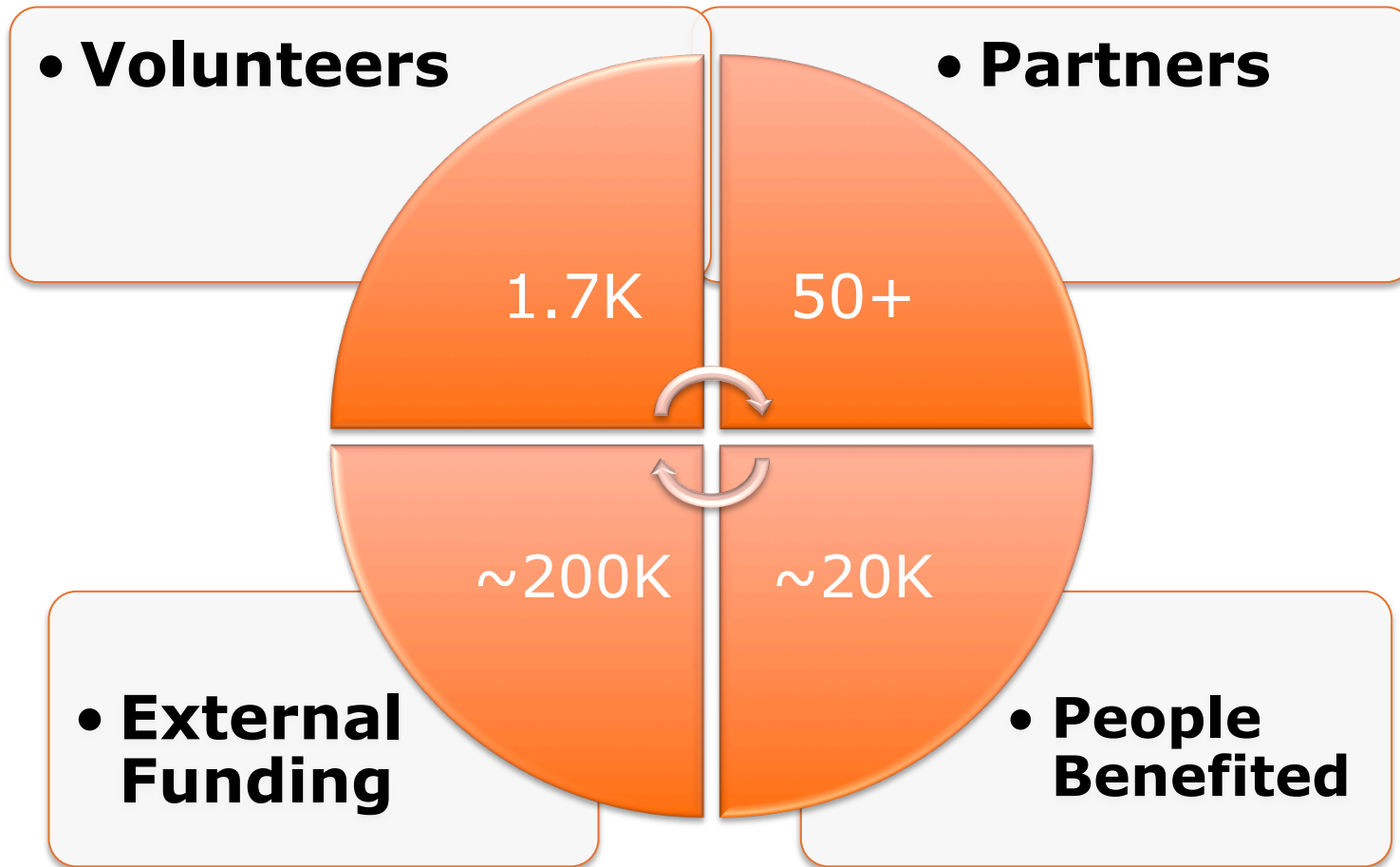


Engineering For Global Development 101 (EGD 101)

- Foundation Education Course under development in association with ASME, EWB, and IEEE



2015 Metrics



Licensing Solar Rickshaw technology to local manufacturers – Bangladesh SIGHT

- PV array to charge batteries
- Torque sensor to supplement battery power
- Off-grid solar charging stations



Solar Powered Transportation – Deep Sea Fishers SIGHT



Structured Engagement Programs

Smart Village Surveys

- **Goal:** Systematic Surveying of the local communities
- 2015 UP SIGHT
 - 700 homes surveyed
 - Kushinagar, India



Standardization and Open Source

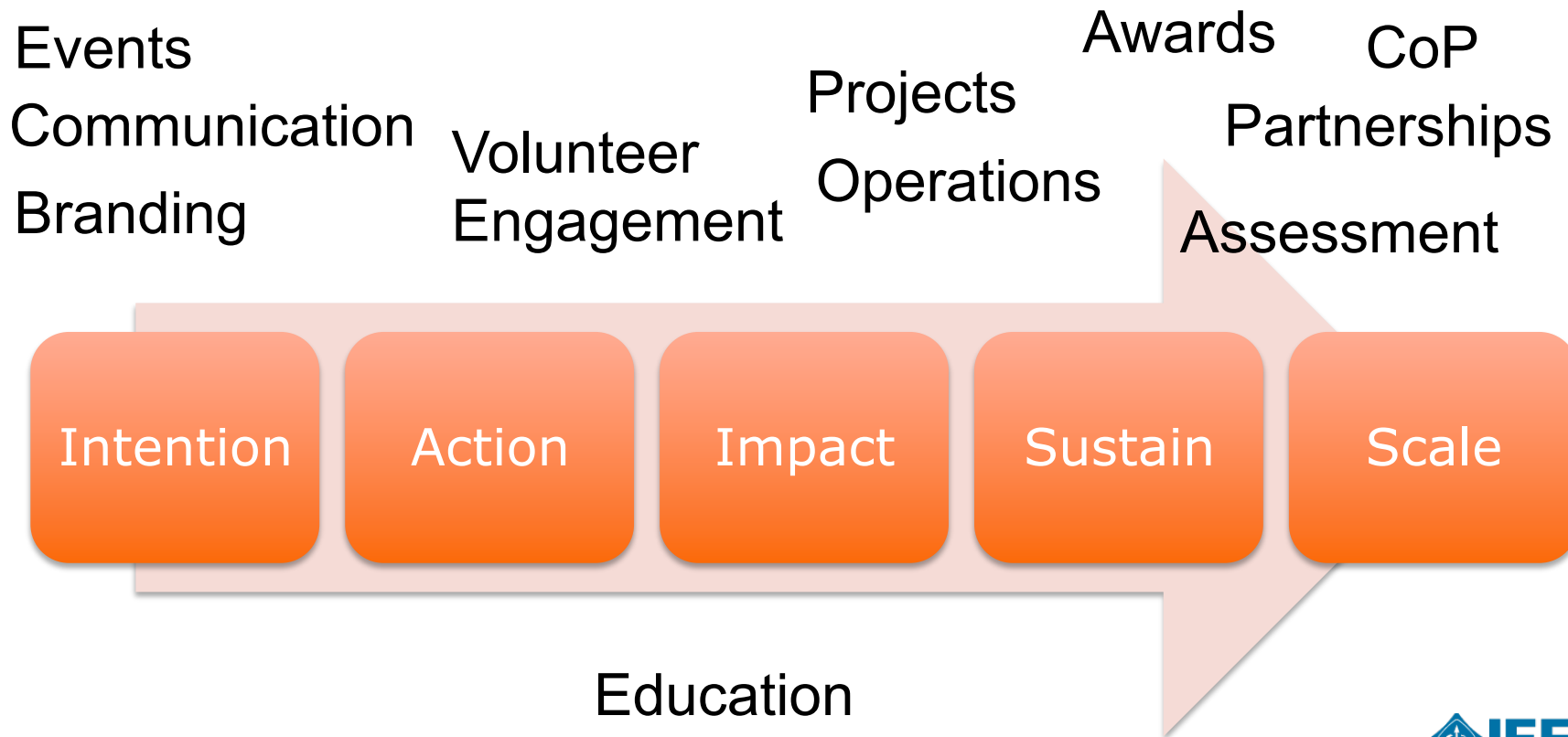


Structured Engagement Programs Build your own Windmills! - Nicaragua SIGHT

- Multiple 3 day Wind Mill workshops
- Maker Space lab equipped with tools & 3D printer
- Do-It-Yourself education material development and dissemination



Engineers in Development: Good intention to Action, and Beyond



Questions?

Thanks!

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- <http://ieee-sight-toolkit.org/>

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