Assistive Technology: Innovating from the Middle of the Pyramid

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July 31, 2013
Over 4 Billion people live off less than $2/day
A lot of need, finite resources.

Focus: Area of great need that address common development issues

- 10/90 Gap Public Health
- Low-income and middle-income countries 5%-15% assistive devices are available

- Cultural Needs
- Social Norms
- Technically Challenging
- Distribution Issue
- Resource Limitations
- Assistive Technology
- Sustainable Repair
Advantages of Providing Solutions in Response to Need

What the American S&T Community can do, and why they would get involved.
Design Priorities
Appropriate Technologies maximize Benefits

- Acceptable
- Accessible
- Quality
- Adaptable
- Available
- Affordable
Jaipur Foot

- Originated in 1975
- Part of the Bhagwan Mahaveer Viklang Sahayata Samiti (NGO)
- 1.3 million polio patients and amputees provided prosthetics
- Four Percent of Budget is Overhead and Administrative

Leveraged Freedom Chair

- Founded in 2012
- GRIT Social Enterprise L3C
- 80% faster; 50% more torque
- 7 countries with regions of focus
- Partial List of Partners:
  - Whirlwind Wheelchair
  - ASME
  - Jaipur Foot
  - Continuum
Interest is present, now how to implement?

How can policy encourage social enterprise?

Foreign Assistance Act 1961

Unified International Development

- Promote Local Ownership and partner with Government and Citizens
- Accountability and transparency
- Evidence-based
- Elevate USAID as the lead development agency

Idea
Implementation
Unified International Development
Helping to further close the ‘Valley of Death’

**Idea**

- **Low-Profit Limited Liability Company**
  - Only Recognized in 9 States and 2 Native American Nations
  - Social Prioritizes Have Precedence
  - Bridges Gap between Non-profit and For-profit

- **Advanced Market Commitments**
  - Arrangement to Encourage Market for Product to Exist at ‘idea’ stage
  - GAVI Alliance
  - Best Way to Close Gap over the Valley of Death

- **Differential Pricing**
  - Private Sector Utilize to Compartmentalize Funding
  - Controversial due to Prescription Drugs
  - Varying Resources and Manufacturing should Affect Pricing
ASME-Governmental Relations Staff-Melissa Carl
Faculty Member in Residence-Dr. Gail Marcus
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John Buydos
Dr. Sean Moseley and Dr. Mark Minster
The WISE Guys!

Acknowledgments
Questions
Bridging the Gaps

Need to Solution

Over 4 Billion people live off less than $2/day

Idea to Implementation
Rose-Hulman Institute of Technology

- Founded in 1874 by Chauncey Rose
- Terre Haute, IN
- First Women in 1995
- 22 Division III Teams
- 2,100 Graduates
- 100 Post Grads
Interest is present, now how to implement?

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GAVI Alliance
Private and Public Collaboration

- Five Public Contributors:
  - Italy
  - United Kingdom
  - Canada
  - The Russian Federation
  - Norway
- Private Donor:
  - Bill and Melinda Gates Foundation
- 2007 contributed $1.5 billion dollars to ensure 200 million doses annually for $3.50 for 10 years
Low-profit Limited Liability

How L3C’s tax classification can benefit the organization and recipients

- Socially beneficial purpose, not maximizing income
- For-profit and non-profit gap
- LLC organization and nonprofit program-related investments (PRI) can be used as explanation for specific business decisions
- Illinois, Louisiana, Maine, Michigan, North Carolina, Rhode Island, Utah, Vermont and Wyoming, Crow Indian Nation of Montana and Oglala Sioux Tribe