

<https://nsrc.org> @NSRCworld

The Network Startup Resource Center (NSRC), which is based at the University of Oregon, was established in 1992 to provide technical assistance to organizations setting up computer networks for connecting scientists in new areas around the world. The NSRC helps develop Internet infrastructure and network operations communities by working directly with the indigenous network engineers and operators throughout Africa, the Asia-Pacific region, Latin America-Caribbean, and the Middle East, in partnership with network operator groups, universities, industry, and government agencies. NSRC is funded primarily by the U.S. National Science Foundation and Google, with additional contributions from dozens of public and private organizations.

ABOUT US

The NSRC cultivates collaboration among a community of peers to build and improve a global Internet that benefits all parties. We facilitate the growth of sustainable Internet infrastructure via technical training and engineering assistance to enrich the network of networks. Our goal is to connect people.

“During the quarter century that this group has been helping to build Internet infrastructure around the world, there’s hardly a place on the planet that has not been touched by the great work of the Network Startup Resource Center.”

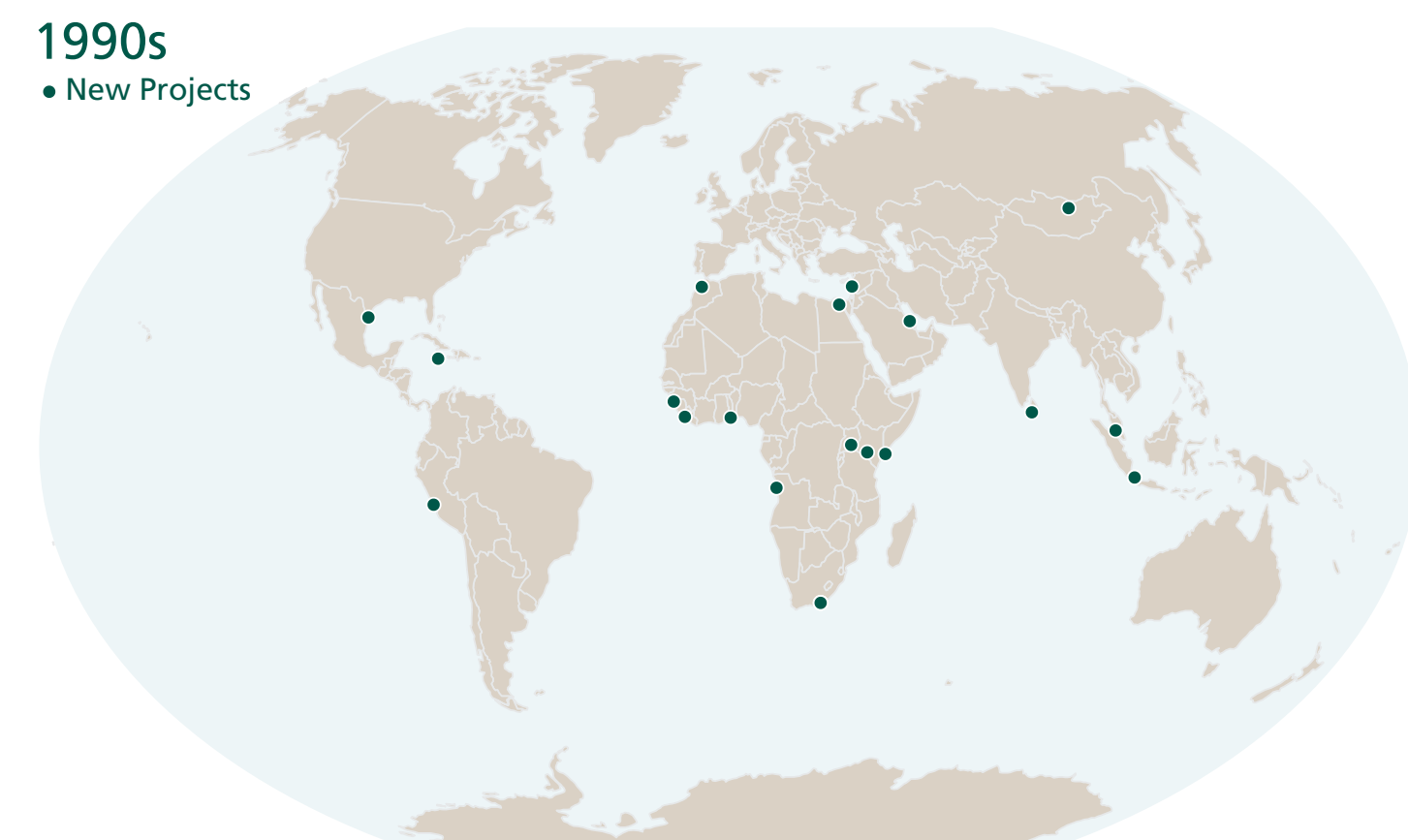
-Larry Smarr

Computer Science Professor and Principal Investigator of the Pacific Research Platform, University of California, San Diego

ACTIVITIES BY DECADE

1990s

• New Projects



2000s

○ Existing Projects
• New Projects

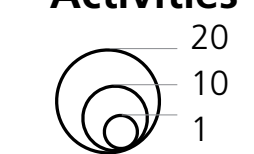


2010s

○ Existing Projects
• New Projects



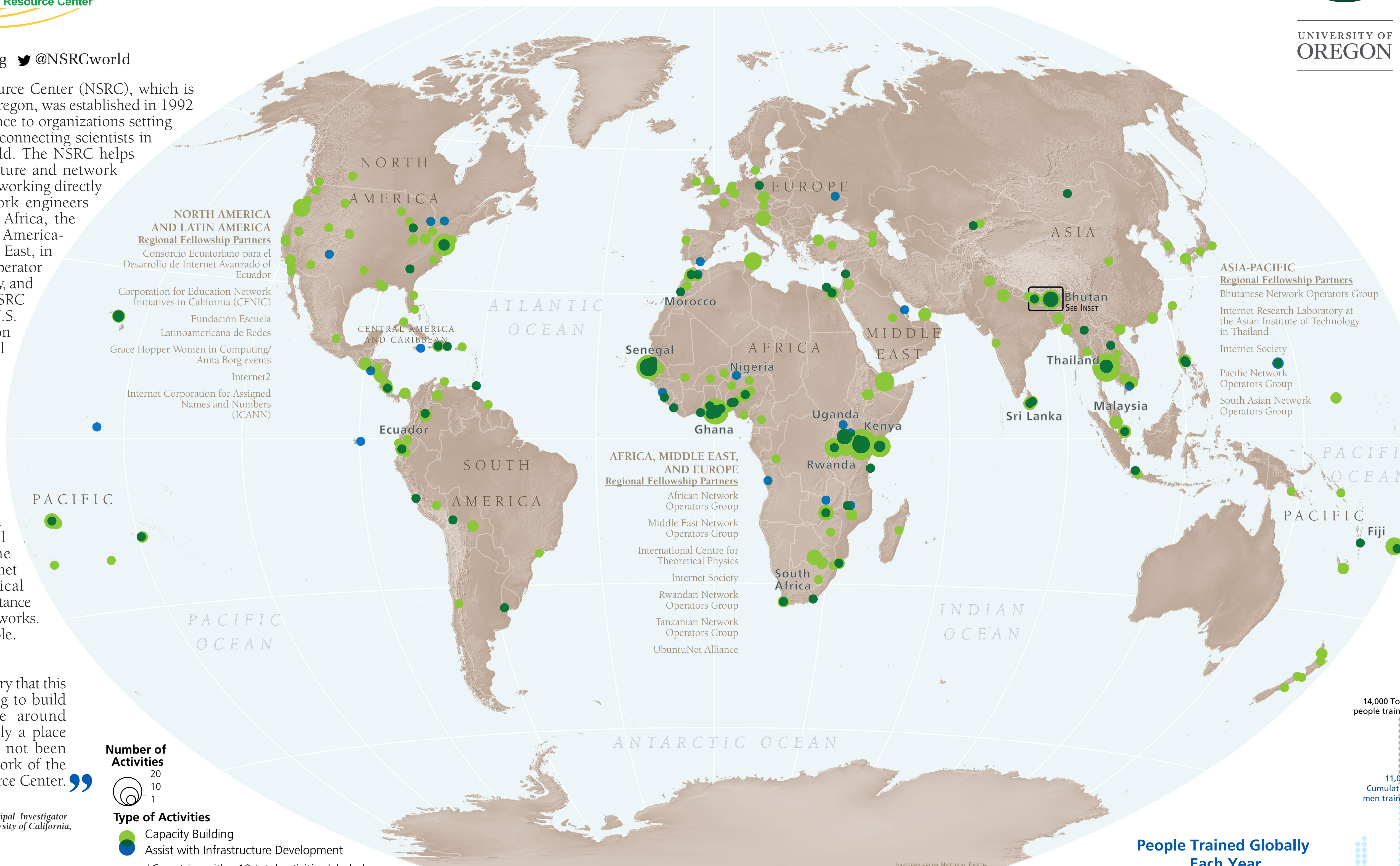
Number of Activities



Type of Activities

- Capacity Building
- Assist with Infrastructure Development

*Countries with >10 total activities labeled

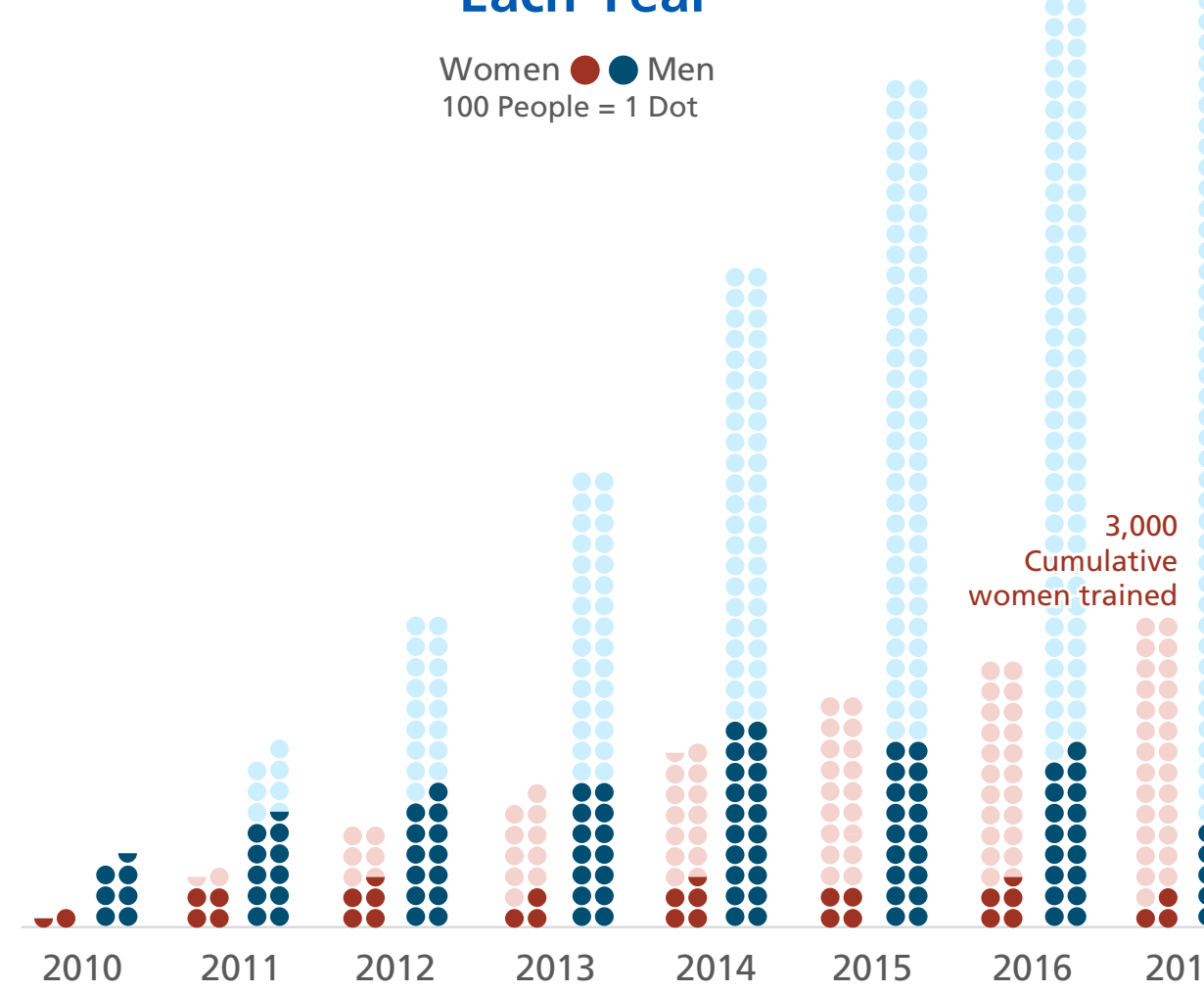


NORTH AMERICA AND LATIN AMERICA Regional Fellowship Partners
 Consorcio Ecuatoriano para el Desarrollo de Internet Avanzado de Ecuador
 Corporation for Education Network Initiatives in California (CENIC)
 Fundación Escuela Latinoamericana de Redes
 Grace Hopper Women in Computing/ Anita Borg events
 Internet2
 Internet Corporation for Assigned Names and Numbers (ICANN)

AFRICA, MIDDLE EAST, AND EUROPE Regional Fellowship Partners
 African Network Operators Group
 Middle East Network Operators Group
 International Centre for Theoretical Physics
 Internet Society
 Rwandan Network Operators Group
 Tanzanian Network Operators Group
 UbuntuNet Alliance

ASIA-PACIFIC Regional Fellowship Partners
 Bhutanese Network Operators Group
 Internet Research Laboratory at the Asian Institute of Technology in Thailand
 Internet Society
 Pacific Network Operators Group
 South Asian Network Operators Group

People Trained Globally Each Year



BHUTAN ACTIVITIES

Capacity Building



NSRC trainers and engineers traveled to Thimphu, Bhutan to help improve core network infrastructure at multiple campus networks in preparation for new high-speed network connections to the Bhutanese Research and Education Network (DrukREN). NSRC provided lab-based network training courses for Campus Network Design and Operations, plus System Administration and Virtualized Infrastructure in cooperation with the network operators of DrukREN and the Office of the Vice Chancellor for the Royal University of Bhutan (RUB). After the workshops, NSRC personnel provided network engineering assistance to Samtse College of Education (SCE), College of Science and Technology (CST) in Phuntsholing, Institute of Language and Cultural Studies (ILCS), Sherubtse College and Jigme Namgye Polytechnic (JNP) and assisted with the design of the Thimphu Internet eXchange Point (IXP).

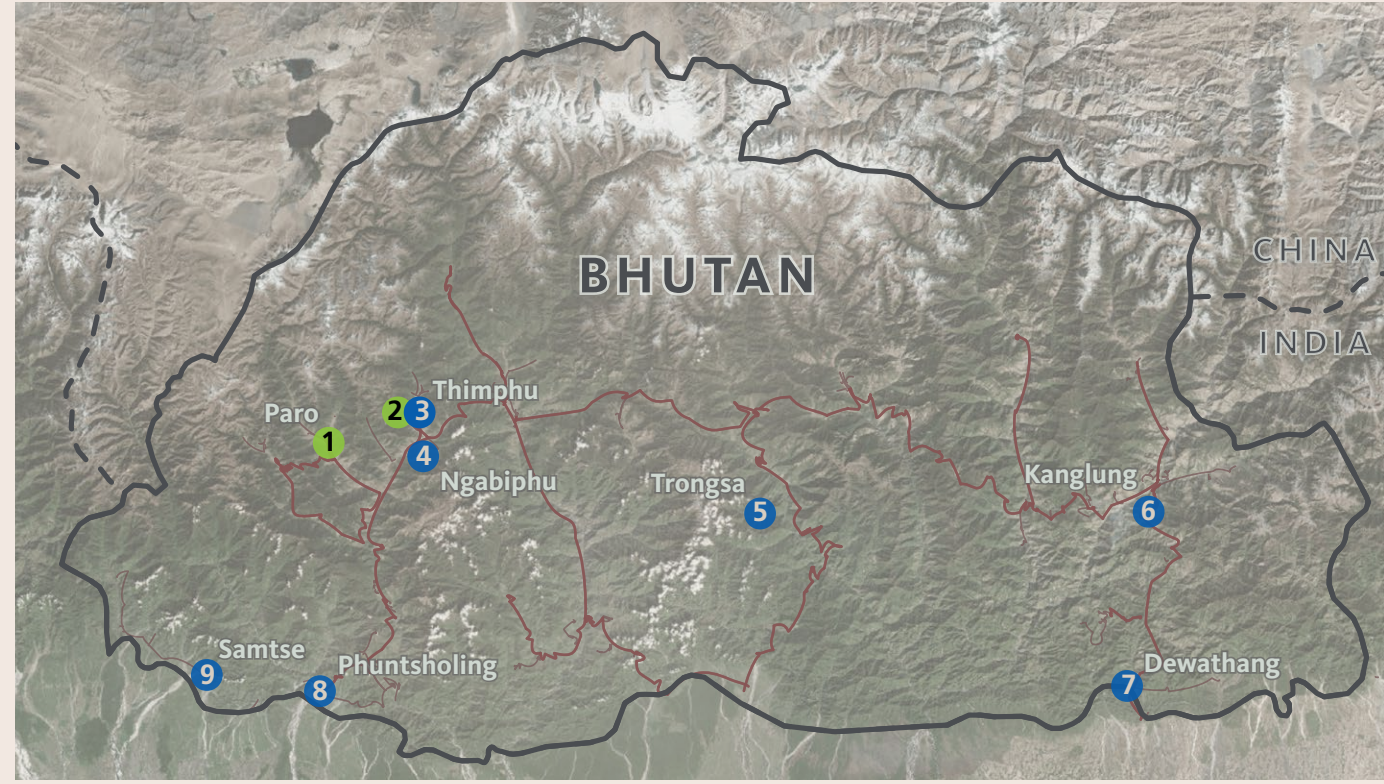
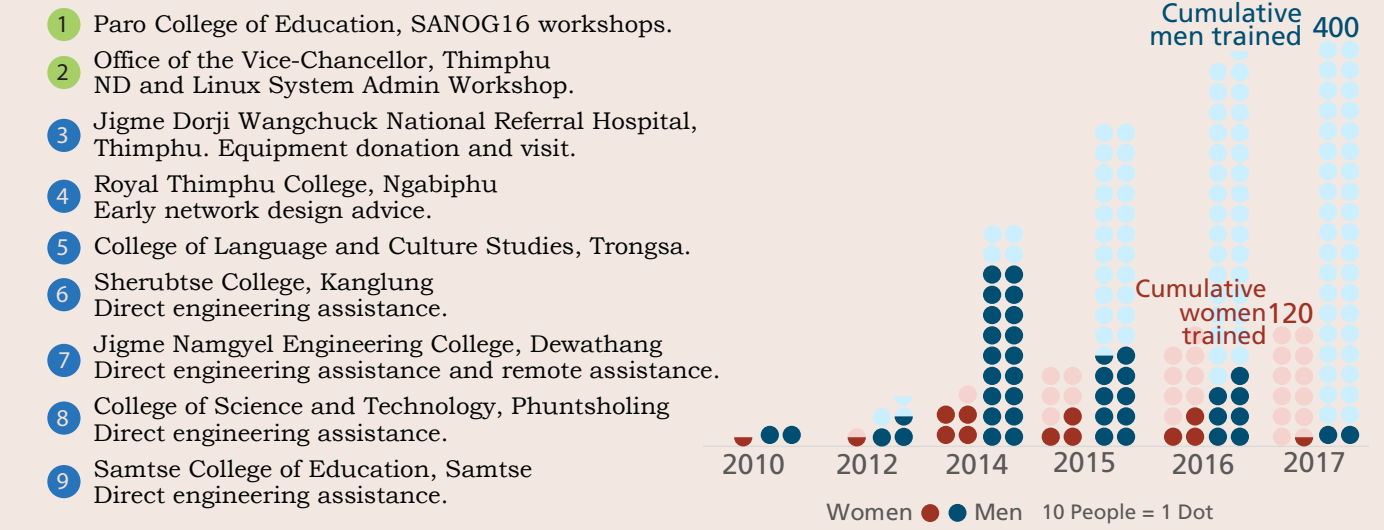
At the request of the Ministry of Information and Communications, the NSRC team provided additional assistance in evaluating the national network design and implementation plans to connect Bhutan to the National Knowledge Network of India (NKN), and the Trans-Eurasia Information Network (TEIN), in order to join the global research and education network fabric. Karma Jamyang and Sonam Wangmo represented Bhutan at the Internet2 Global Summit in Washington, DC in April 2015 as part of the Internet2-NSRC Fellowship program, now in its tenth year.

Assist with Infrastructure Development



NSRC shipped a half-ton of network switches and routers to Bhutan for donation to DrukREN and deployment across multiple campuses immediately following the technical training workshops. The equipment was deployed at campuses throughout the country for strategic improvements so they can be ready to utilize the opportunities provided by their new connectivity to DrukREN, NKN and TEIN, with core funding support from the European Commission's Directorate-General for International Cooperation and Development (DG DEVCO). DrukREN will also peer at the Thimphu IXP to exchange local network traffic with other Bhutanese network operators as part of this project.

2015 Activities in Bhutan People trained in Bhutan



NSRC SUPPORTERS

Credits
 Cartography and design by: Joanna Merson and James Meacham UO InfoGraphics Lab, Department of Geography.
 Data Sources: Activity data from NSRC. World basemap imagery from Natural Earth. Bhutan basemap imagery from Esri, Digital Globe. Photos: Top photo by Amanda Thomsen from the South Asian Network Operators Group Workshop and Conference, Thimphu, Bhutan, January, 2014. Bottom photo by Dean Pemberton from Direct Engineering Assistance for DrukREN, Bhutan, September 2015. This work is partially supported by the National Science Foundation's International Research Network Connections program under Grant Award Number 1451045. Printed May 2, 2018.

