

Global Economic Development: Putting ICT to Work

Cisco's economic development programs build on the company's core competencies in networking and ICT to help communities grow their economies and individuals improve their standard of living. We partner with public-sector organizations and nongovernment organizations (NGOs) as well as other companies to develop programs that are globally scalable, replicable, and sustainable.

About the Sichuan Earthquake

The seismic shock that struck Southwestern China on the afternoon of May 12, 2008, resulted in a heavy loss of life, massive destruction, and widespread social disruption across Sichuan and parts of adjacent provinces. Measuring 8.0 in magnitude, the earthquake left over 87,000 killed or missing, more than 374,000 injured, and millions without shelter.

Cisco, the Cisco Foundation, and Cisco employees responded to the crisis by providing more than \$2.6 million in grants and donations for immediate relief aid, including Cisco technologies used to deliver medical care to remote regions. Following this initial response, Cisco Foundation made an additional \$1 million commitment for quake relief and rebuilding, \$500,000 of which has already been disbursed to Teachers Without Borders, Habitat for Humanity, and the China Federation for Poverty Alleviation.

But despite these significant initial relief efforts, the rebuilding of lives and communities will take years. Connecting Sichuan is contributing to that comprehensive community regeneration effort.

Connecting Sichuan

Connecting Sichuan (formerly known as Cisco China Public-Private Partnership) is a multifaceted initiative whose ultimate goal is to improve economic and living conditions in China's Sichuan Province. The three-year program, now in its second year, is focused primarily on helping the Chinese government to rebuild regional healthcare and education infrastructures that were severely damaged by a massive earthquake in May 2008. By designing and implementing pilot programs that integrate ICT into medical services, schools, and other community institutions, Connecting Sichuan is creating successful prototypes that can be expanded to other rural regions of China, which have generally fallen behind the country's more highly developed and prosperous urban centers.

On July 1, 2008, a memorandum of understanding forged a partnership between Cisco and the Sichuan Provincial Government. Cisco agreed to contribute \$45 million (about RMB 300 million) over three years to aid the Sichuan rebuilding effort. The Cisco team is working closely with government officials, community leaders, global industry advisors, and other organizations to build a program that addresses local community needs, but can also serve as a model for similar endeavors in the rest of China and around the world.

In selecting projects, the partnership pays particular attention to these criteria:

- **Strategically significant:** The locality and organization must have an urgent need for aid and offer a significant opportunity to have an impact.
- **Satisfactory ICT conditions:** The area must have sufficient electricity to power the equipment, and residents should be computer-literate or eager to learn.
- **Local ownership/commitment to sustainability:** Leaders and users must have a willingness to support the technology-enabled solutions, and demonstrate this willingness by investing human and financial capital.
- **Showcase benefits:** Solutions must have visibility and be measurable and transferable, so the benefits can be replicated in other areas and circumstances.

During the past year, Cisco's contribution to the Sichuan rebuilding effort was recognized by two of China's national ministries: Cisco received the 2008 China Philanthropy Award from the Ministry of Civil Affairs, and the Ministry of Commerce Award for 2009.

Personalized Medical Care from a Distance

Ma Yuan Jiang is a Sichuan resident who lost his left hand and suffered other trauma while trapped in earthquake wreckage for 179 hours last April. He is now in the process of learning to use an artificial hand. During the first trial run of a Cisco HealthPresence environment in the Sichuan Provincial People's Hospital in Chengdu, Ma conferred with health experts in Hong Kong using a high-resolution video and audio connection.

The government plans to employ HealthPresence technology to establish the Sichuan-Hong Kong Rehabilitation Center, a site for future teleconsulting in Chengdu. In addition, Connecting Sichuan has outfitted a special emergency vehicle with the technology that will travel to rural communities, where generalists can treat patients while keeping close contact with physicians and specialists back at the hospital.

Sichuan Healthcare Initiatives

In the wake of the earthquake, the challenges to healthcare delivery in Sichuan have been immense. Sichuan's per capita healthcare resources were below China's national average even before the disaster, and the situation has been greatly exacerbated by the large number of casualties and the destruction of medical facilities. Connecting Sichuan has committed to helping restore services, and also to laying the foundation for a 21st century healthcare system. The program's initiatives are compatible with the government's Healthy China 2020 reforms aimed at delivering universal health services throughout the country.

Healthcare accomplishments for Year One:

- Connecting Sichuan has been successful in planning and developing initial pilots for collaborative care, an approach to improving access to medical treatment that involves connecting patients with medical experts located outside the immediate community. The pilots were designed and delivered by several partners, including the Sichuan Department of Health, the Provincial People's Hospital, West China (Huaxi) Hospital, StandTALL, and the Youth Foundation.
- Starting in September 2008, a Cisco Unified Communications solution successfully supported remote diagnoses between Huaxi Hospital in the provincial capital of Chengdu and temporary field hospitals in Qingchuan and Dujiangyan.
- Cisco HealthPresence was installed in the Sichuan-Hong Kong Rehabilitation Center at Sichuan People's Hospital in May 2009. (HealthPresence combines state-of-the-art video, audio, and medical information to create a virtual environment similar to what most people experience when they visit a doctor or clinic in person.)
- As of May 2009, other links to injured victims have been provided by a Mobile HealthPresence Clinic, a custom-made Isuzu vehicle equipped with state-of-the-art technology. A field test was successfully conducted in Wenchuan County.
- Connecting Sichuan supported a comprehensive architecture review and developed a data center performance improvement plan for the New Provincial New Rural Co-op Medical Insurance System (NRCMIS), which was experiencing overload conditions due to the large number of earthquake victims.
- In partnership with the Sichuan Department of Health and SinoSoft, the program launched the Sichuan Province Health Network Planning project in March 2009. The Phase I report provided a detailed analysis of the province's current health ICT requirements.
- Connection Sichuan designed a high-level regional health information consolidation and network plan for Deyang City. Core components of the plan include a regional health network, collaborative care, and electronic health records.
- The Healthy Wenchuan project was launched in concert with ECCOM Network System Co. Ltd., a network infrastructure services and solutions provider; CNA China Company, Ltd., specializing in building management solutions; and Huaxi Hospital. The project includes a countywide network with shared applications and IT services, a health emergency and operation center, a connected hospital solution for the rebuilt Wenchuan County People's Hospital, and a mobile health clinic providing a shared diagnostic imaging capability for rural clinics.

“Everywhere I go, I describe Cisco as a company of passionate people who enable, ennoble, and empower communities worldwide through collaboration and human networks. Connecting Sichuan is doing just that for the people of Sichuan.”

— Fred Mednick, Founder and CEO, Teachers Without Borders

Sichuan Education Initiatives

Connecting Sichuan has designed and tested solutions to help address education priorities that include improving the quality of education in rural areas, enhancing teacher training, adding to the number of teachers, and strengthening vocational education. These solutions are aligned with the Ministry of Education's national priorities and the priorities of the Sichuan Department of Education.

Working closely with the Sichuan Department of Education and local bureaus of education, the program developed models for 21st century classrooms that were operational by September 1, 2008, when schools reopened for the first time after the earthquake. These models were enhanced by a metropolitan area network that will be used during the 2009–2010 school year to deliver streaming video and distance learning to schools and communities that lack qualified teachers. The video connections not only help students learn, but also enable educators and administrators to confer and collaborate.

Education accomplishments for Year One:

- The program developed model schools appropriate for specific community types. Four prototypes were completed: a city school, a town school, and two vocational colleges. The city school model is at Dujiangyan High School, the town school prototype is at ZunDao, and the vocational college implementations are at Aba Teacher's College and Pengzhou Vocational College.
- We are creating an “education cloud” in which high-quality, scalable, virtualized services and resources can be delivered over the network at minimal cost.
- We designed innovative solutions and services for rural schools, including using renewable energy sources in the SongPan village school solution.
- Twenty-five new Cisco Networking Academy sites were established and 103 new instructors have been trained. Student enrollment has increased 18 percent in the past year.
- We donated and installed 210 interactive classroom environments to date, which are equipped with computers, projectors, interactive whiteboards, responders/voting devices, digital content, and secure Internet access.
- We provided 490 computers to teachers and trained 575 teachers on how to use PCs, the Internet, and interactive whiteboards, as well as how to create and teach with digital content.
- We are already seeing encouraging signs of progress. For example, the ZunDao school set a record this spring when it achieved a number 1 ranking in English and science and a number 2 ranking in Chinese literature on the year 6 examination. The school is seeing more of its graduates from year 9 accepted into nationally recognized “key schools” for high-achieving students.

Looking Ahead

Much of the first year of the program was devoted to planning and design, feasibility testing, engaging partners, and implementing pilots. In Year Two, the program will move into an intense execution and implementation phase. Although continuing to focus on innovation, Connecting Sichuan will also speed the pace of implementation and increase the number of people and communities benefiting from the joint efforts.

In the third and final year, the program will largely concentrate on ensuring the sustainability and scalability of the deployed solutions. Much of the initial infrastructure will be established by the 18-month mark, and many of the planned network-enabled services will be implemented by the end of the second year, allowing the program to shift from designing and testing to implementing and scaling.

Download the full Connecting Sichuan Year One Report [here](#).

Partnership for Lebanon

[Partnership for Lebanon](#) was formed by U.S. business leaders in September 2006 to provide critically needed resources for reconstruction efforts in Lebanon, and to help build a better future for the Lebanese people. The initiative is led by five companies: Cisco, GHAFARI, Intel, Microsoft, and Occidental Petroleum. Working through public-private partnerships and with the Lebanese people, Partnership for Lebanon is devoted to expanding the reach of education and workforce training, creating jobs, building technology infrastructure, and using technology to connect communities with the services and resources they require. Cisco's investment was \$20 million over three years.

Goals

Partnership for Lebanon continues to work in five key areas:

- **Connected communities:** Enable full-service online community access points across the country that provide local portals for access to job training, healthcare, education, and other resources.
- **Workforce training and education:** Place qualified Lebanese interns in top businesses in the United States and Lebanon to improve their prospects and plant the seeds of economic growth among Lebanese youth; also, expand the number of Cisco Networking Academy implementations.
- **Job creation/private sector revival:** Create jobs and develop careers to help halt the country's brain drain, particularly in the small and midsize business sector.
- **IT infrastructure:** Help Lebanon modernize its network infrastructure by improving the speed and efficiency of Internet traffic and by providing an economical foundation for better communications and e-commerce.
- **Relief and response:** Contribute funds and work with NGOs to rebuild homes, rehabilitate schools, and expand training programs.

Progress

- **Workforce training/ICT interns:** The partnership is placing qualified ICT interns in Lebanese businesses and government agencies, as well as in top U.S. corporations. Twenty-five interns completed their training in the Lebanese public sector in November 2008. Though most were applying for jobs outside Lebanon, 68 percent have now found jobs within the country. All the interns are currently enrolled in the partnership-sponsored Cisco CCNP technical training. In addition, 20 interns were placed in Cisco offices in the U.S., 17 of whom have found jobs or have returned to college. This group obtained a record number of Cisco certifications for an intern class: 12 Cisco CCNA certifications, 12 Cisco CCNP/CCVP® certifications, 8 Cisco CCIE written certifications, and 2 Cisco CCIE laboratory certifications (the highest Cisco Certification level).

Internship Gives College Graduate a Boost into ICT

During the fall of 2007, Yasmine Nsouli joined the internship program at Partnership for Lebanon. Like most of Lebanon's youths, she was having a difficult time finding employment and had been looking for jobs outside the country. Her experience as an intern gave her an understanding of the essential role that ICT plays in fostering economic growth in Lebanon and the rest of the Middle East, particularly with respect to innovation.

Today, Nsouli is working in Lebanon with Cisco's Brand Protection Team. As part of her job, she collaborates with government leaders, trade bodies, and key thought leaders to ensure that Cisco's intellectual property is protected throughout the region.

She feels that she is living her dream by staying in the region and getting the opportunity to encourage innovation and growth in the ICT sector there. "I'm thankful to the Partnership for Lebanon for not only giving me the chance to work in my beautiful country, but to work for my country as well," she says.

- **Workforce training/business leaders:** U.S. business leaders shared their experience with their counterparts in Lebanon during the year. For example, Michel Kilzi, CEO and founder of the Lebanese ICT firm [ActiveMania](#), was matched with two executives in Cisco's Asia Pacific theater of operations, Karen McFadzen and Jerry Fan. Six months after joining the program, Kilzi is well on his way to achieving his goal of establishing a presence in Asia Pacific markets.
- **Education:** In late 2008, Partnership for Lebanon began working with Lebanon's general director for the Ministry of Education and Higher Education (MEHE) to establish a national education network to provide a reliable infrastructure to meet the long-term needs of Lebanese students, teachers, and administrators. In conjunction with the Hariri Foundation, the partnership donated equipment to connect two model public schools and 50 other schools, as well as funds to cover installation and operational costs. Working with the United Nations Children's Fund (UNICEF) and with the support of MEHE, the partnership launched the School in a Box pilot program. School in a Box uses ICT as a tool to shift education from a traditional teacher-centric teaching style to more learner-centric methods that reflect 21st century education principles. The project is currently funded by \$250,000 in grants from partners and is being piloted in seven schools.
- **Job creation/private sector revival:** Cisco's Rural Enterprise Development for Information Technology program is working with NGO partner Relief International to select and train local microfinance institutions Al Majmoua and Ameen to administer loans and offer access to capital for businesses in the ICT sector. Cisco announced a \$1 million grant to Relief International in January 2008. As of June 2009, 49 loans had been disbursed, totaling \$105,200. In addition, Intel and Cisco have each invested \$500,000 in the Berytech fund, which provides capital to ICT companies in early growth stages that have demonstrated a high potential for success.
- **ICT infrastructure:** More than 5600 individuals and organizations expressed their support by signing the [Broadband Manifesto](#) announced in January 2008. The Lebanese Broadband Stakeholders Group was launched in October 2008 to identify and resolve issues related to connectivity in Lebanon, and to create broad nonpartisan support for broadband access. It will take approximately 10 years and \$400 million to build the broadband core and access networks in Lebanon, but return on investment is projected to be approximately 15 percent per year.

Next Steps

The partnership believes that by 2013, most of Lebanon will have access to affordable high-speed broadband service over the most sophisticated network in the Middle East. Because the number of Networking Academies in the country more than doubled in FY08, from 22 to 46, Cisco expects a significant increase in the number of skilled Lebanese ICT graduates.

Cisco's Commitment to the Clinton Global Initiative for Sub-Saharan Africa

In September 2007, Cisco made a four-year, \$10 million commitment to the Clinton Global Initiative to alleviate poverty in five Sub-Saharan African countries: Cameroon, Ethiopia, Kenya, Nigeria, and Rwanda. Cisco and our NGO partners [Habitat for Humanity](#), [Inveneo](#), [One Global Economy](#), and [Teachers Without Borders](#) have focused on providing affordable housing, community connectivity, online content and tools, and hands-on training. Most of the first year was devoted to planning; implementations began in September 2008.

Goals

- Habitat for Humanity planned to serve low-income families by providing them with decent shelter, basic homeowner education, and community leadership training over the next four years.
- Inveneo planned to provide low-cost, end-user computing and networking solutions through its Inveneo Certified ICT Partners (ICIPs) model, with the objective of increasing network access and promoting local employment in rural communities.
- One Global Economy planned to extend its [Beehive](#) portal to provide low-income people with accessible and easy-to-understand tools and information on a wide variety of topics, including money, health, education, jobs and careers, family, and starting a business.
- Teachers Without Borders planned to support the professional development and practice of teacher leaders in Sub-Saharan Africa through online tools, courses, certifications, conferences, and teaching and learning centers.

Progress

- As of June 2009, Habitat for Humanity had built 88 houses, and another 35 were in the process of being built.
- As of June 30, 2009, Inveneo had certified 26 ICT companies as ICIPs in four targeted countries. In all five countries, Inveneo and its ICIPs served or completed ICT projects in 91 communities, improving the lives of 190,000 people directly or indirectly.
- As of June 2009, One Global Economy (OGE) Beehive portals were active in Ethiopia and Rwanda. OGE conducted issues-identification workshops in Cameroon, Kenya, and Nigeria in the first half of 2009 and is currently in the process of building Beehive portals for each of those countries. The company is also developing two sets of training curricula: one set is designed to train "digital connectors" on computer and Beehive skills as well as entrepreneurship, leadership, and community skills, while the other set is to teach community knowledge center managers how to create additional revenue streams at centers. OGE is also working to provide social networking functionality on its media properties to allow Beehive users, digital connectors, and community knowledge center managers to connect with one another and share best practices.

- As of July 2009, 8773 teachers had participated in Teachers Without Borders (TWB) professional development training based on the new TWB platform. TWB's Millennium Development Ambassadors (MDA) program expanded into Kenya, providing face-to-face workshops for leaders who then train others. To date, the MDA program has reached 218 teachers in 17 Nigerian states and the Nairobi area in Kenya.
- In Kenya, 250 teachers attended a teacher professional development conference, and more than 40 teachers then took the TWB Certificate of Teaching Mastery online.
- The motor park literacy program in Abuja, Nigeria, has served at least 177 taxi and bus drivers.

“One of our key priorities is to build a market economy in close cooperation with the private sector. We commend Cisco for its commitment to helping us accomplish this goal, and look forward to working together toward enhancing the social, economic, and education opportunities for the people of Palestine. This contribution, we hope, will help prosperity and peace in the region.”

— Mahmoud Abbas,
President of the
Palestinian Authority

Palestinian Investment Commitment by Cisco

In January 2008, Cisco announced an investment of \$10 million to seed a sustainable model for job creation and economic development in the Palestinian Territories. The three-year investment was made in cooperation with the president of the Palestinian Authority, Mahmoud Abbas.

Goals

Key aspects of the commitment include potential venture capital investments targeted at high-potential small businesses throughout the region, and the development of training programs to foster ICT skills. Cisco also committed to engage in multistakeholder collaborations to encourage further investment in the Palestinian Authority economy from local, regional, and global organizations.

Progress

- Outsourcing projects are being implemented with Palestinian vendors, and contracts have been signed with three Palestinian companies: Asal Technologies, GSSI, and Exalt.
- About 30 Palestinian employees have been assigned to the projects, 18 of whom were recent college graduates.
- Investments to date include \$1 million for first-year outsourcing engagements, \$44,000 for involvement in MYTecC, \$34,000 for incubation evaluations, and \$80,000 for project management.

Next Steps

- The engagement will work with Cisco's Chief Development Organization to finance continued outsourced work to Palestinian vendors.
- The initiative plans to build a curriculum directed at outsourcing vendors and tailored to the Palestinian sector's needs.
- Other companies will be guided in the process of working with the Palestinian sector, including making the right contacts, interacting with authorities, and complying with regulations.
- An incubation program coupled with a seed fund will be implemented to encourage and support the creation of ICT startup companies.