Digital Nepal
Nepal: Wireless network innovator

Nepal has some of the highest mountains on Earth. So developing nationwide communications has to be challenging; so challenging that few thought digital connections would be possible, until Doctor Mahabir Pun, winner of the prestigious Ramon Magsaysay award for Leadership in Asia, decided things might be different

MAHABIR PUN
I work as a teacher for twelve years in Nepal and then I went to America to get my further education. Then I came back to Nepal in 1992 and I decided to stay. In 1996 Nepal got internet: first time. But I had to walk one day down from the village to the nearest town and check my email once in a month. And that is one reason why I was trying to find ways to bring internet in the rural areas. The second thing is we had to send some message from one village to another village. We had to walk three hour, four hours sometimes one day. And I was tired of walking from one village to another village, like, doing that for several years. True, I was, you know, trying to find ways to bring internet or develop a communication system between the villages. Computers were very expensive that time; there was no way we could afford to buy computers. So, when I went to America I brought used computers back, actually from the recycle centre and build those computers in wooden boxes.

MAHABIR PUN
The very first antenna that we built on a tree to connect my village to the nearest town to get internet connection. Telecommunication engineers, I talked to them they said, 'No, it is not going to work Why do you spend your time? Don't waste you time?' That's what they were saying, you know. I said, 'Oh no, no, why not, no, let's try it. If it doesn't work it doesn't work, that's fine'. And so we kept trying and then became able to build the first wireless network in 2002.

MANESH SHRESTHA
30-35% of the country has access to electricity; the rest of the country does not have electricity. And this is usually the urban areas across the country that have computer access. And that's, that's the reason why, and even though there is a optional course in computers for schools according to the government curriculum, most schools do not have computer as a subject in schools in the villages and the rural areas. The state in Nepal says that Nepal has the highest hydroelectric potential. But then to generate electricity out of that hydro power needs a lot of capital investment.

MAHABIR PUN
To build the wireless network we of course need power. But when we build the replay stations in higher places those places we don't have power from the grid line – we have to use solar power. And when it is cloudy and then we have, sometime we have problems because there is not enough power. So, we expanded the network to these nearways towns. Our goal that time was just to, you know, use the wireless network for communication at least between the villages, and to communicate with the outside world using the internet. But when we kept working on the network then we found that a wireless network can be used for doing videoconferencing.