



TURNING INDIA'S RED CORRIDOR GREEN

Case Study

The world's largest green mobile network is now live in Left-Wing extremism affected Indian states



Can mobile towers light up lives, connect families, open doors to the world, provide livelihoods, and make lives easier?

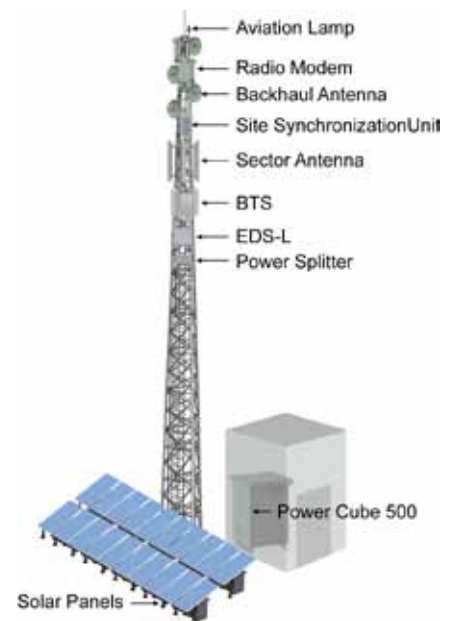
Yes, they can. And it's happening in areas worst-affected by Left Wing Extremism in India!

Summary

Recognizing that combating insurgency in India's Red Corridor must include the provision of a robust communication network as an important element of its strategy, the Ministry of Home Affairs decided to build a mobile phone network in the most-affected regions across ten Indian states. These include some of the most hostile terrain in the country, with practically no roads, power or security. Against such imposing challenges, some 2199 solar-powered mobile communication towers have been setup in a record time of less than a year, altering not just the geographical, but critically, the social landscape of the area. Deprived citizens, almost living on the edge of poverty now have a window to the rest of the world, as they start using mobile phones to connect with families, employers, doctors, local bureaucrats and politicians, boost their productivity through better education, get access to agricultural inputs and markets, finance and banking and avenues for small businesses, and slowly start moving on the path to progress. Just how much integration and social change this investment will bring about can only be measured rightfully in the years to come.

The Problem

Left-Wing extremists have taken root in substantial areas of some 10 states of India, disrupting state machinery and activities. These are poor, under-developed and inaccessible, heavily-forested regions, with almost no infrastructure, such as roads, railways and power. Development efforts are systematically thwarted by insurgents. The Government of India has therefore evolved a multi-pronged strategy to develop and mainstream these areas, one of which includes the setting up of a mobile communication network. It is well documented that ICT development leads to all-round economic growth.



Typical LWE Site

Impact

- 90 districts in 4 states
- 22,688 villages
- 1.8 crore connected citizens
- Connected and enabled security forces





“I can now simply call the Krishi Call Center for all farming related queries...”

Rajesh Kumar, Farmer
Village Masyato



“Now we don’t have to travel 40 KMs to District Office to check the status of village related projects or for booking railway tickets.”

Mahesh, Villager
Village Kiraba



“We can now inform our family if we are getting late from school or if we are stuck somewhere...”

Sujata, Student
Village Kiravar



“Recently we could save a pregnant woman and her baby’s life by being able to call the ambulance on time.”

Kamla Devi, Sarpanch
Village Kondra

The Solution

2199 mobile communication towers have been setup and commissioned in these areas, in a record time of less than one year. Low-powered base-stations beaming GSM voice and data signals within a radius of 5 km each are networked with the nearest BSNL exchanges. Wireless backhaul access and subscriber management is provided by BSNL. All sites are solar-powered, with battery-storage.

The Benefits

Voice and data connectivity has opened the doors to a whole new world for citizens. In areas bereft of roads, railways and electricity, communicating with family, friends, associates and the outside world is now possible. Information related to agricultural inputs and markets is now available. Banking and other commercial activities are now accessible. Emergency and other health

services are within reach. Governance is easier and more interactive.

An ubiquitous network now helps counter-insurgency operations. Security personnel can also be in touch with their families, living far away.

The Cost

Funded by the USOF, the project costs in the region of Rs 3500 crores. This includes CAPEX as well as O&M for a period of 5 years.

The Players

The project has been executed by Vihaan Networks Ltd (VNL) and Himachal Futuristics Communications Ltd (HFCL) on behalf of BSNL.

VNL has setup 1315 towers, while HFCL has setup 521. The balance 363 existing towers have been refurbished by VNL.

Since publication, this number is set to increase, as there is likely, an additional number of towers that are being commissioned by BSNL.



ABOUT VNL

VNL makes the award-winning WorldGSM™ system, the sustainable turnkey GSM and Broadband solution specifically made for remote locations. It also makes a range of Privately Owned and Managed GSM & Broadband Network solutions for specialized applications like secure communications platform for tactical operations such as defense and homeland security, communications for remote industrial centers and rapidly deployable networks for disaster and emergency situations.

VNL's pioneering work has been widely praised: during Mobile World Congress 2010 in Barcelona, VNL was the recipient of GSMA's 2010 "Green Mobile - Best Green Programme Product or Initiative" Award. VNL was also named as a Technology Pioneer 2010 by The World Economic Forum. In addition, VNL was named the third most innovative company - and the most innovative telecom company - in the world in the Wall Street Journal's annual Technology Innovation Awards in 2009.



The VNL logo is registered trademark of Vihaan Networks Limited. Other product names, logos, trademarks and photographs featured or referred to in this document are the property of their respective trademark or rights holders, and has been used purely for illustration purposes. VNL assumes no responsibility for any inaccuracies in this document and reserves the right to revise this document without notice.

CORPORATE HEADQUARTERS

Vihaan Networks Limited
21-B, Sector 18, Udyog Vihar
Gurgaon 122 015, Haryana, INDIA
Tel +91 124 265 7600
<http://www.vnl.in>

