

## Building Geo-Community for Women through Energy Access, and Improved Health-Services

The concept proposes to set-up GPS (Global Positioning System) enabled mobile health-care cum telemedicine vans using information and communications technologies (ICTs) in order to provide clinical health-care services at a last mile, and save lives in critical and emergency situations, one each for the existing Primary Health Centres (PHCs) in the selected downtrodden region(s) in India. These vans will consist of basic health related equipment which will run with the help of solar panels situated/mounted above the van. These equipments will include a refrigerator for vaccine storage, an ultra-sound machine, blood pressure checking equipment, portable X-Ray machine, and water heating equipment among other machines which will be powered mainly from solar PV system as well as partially through diesel operated van in adverse climatic conditions using smart optimization techniques. In case of an emergency, the user will call or, send an SMS through a dedicated help-line number (IVR based) to the centralized location for all the PHCs to avail health-care facility of the van. The respected PHC will send the van to the concerned location, which will be a village falling under the area of the PHC. All of these proposed health-care vans will be equipped with on-board GPS enabled vehicle navigation systems which will be associated with a GIS (Geographic Information System) based centralized server. Real-time positioning for each of those vans, services offered through-out the day etc. will be tracked on a GIS map remotely (in a PC/laptop or, mobile) through a centralized location to improve the value-chain management for health-care services and energy access to the community of the villages by facilitating those vans more efficiently and effectively on-time. Simultaneously, an SMS or, bulk information using 'geo-fencing' service will also be sent to the residents of the village, which will help them to avail the health-care facility as well as provide them with the service of charging their mobile phones and batteries from the van using solar power. The proposed scheme would also help to reach-out those underserved women in rural settings for basic education, prevent malnutrition etc. The concept will further showcase the usage of mobile technology to provide health related services to village communities, along-with the access to energy through a facility to charge mobile phones (including bill-payment/pre-paid recharge), and batteries with the help of clean source of energy. These batteries will further be used to provide lighting facility in these villages. This concept can be implemented at a pilot scale, which will be used to demonstrate the viability of the sustainable model(s) to the Government agencies for further implementation at national level.