

# COMMUNITY NETWORKS WITH FREEDOMBOX

## Case study Overview



### Problem

In today's digital age, access to the internet has become a necessity for individuals and communities worldwide. In tribal areas, where remote villages often grapple with limited infrastructure and connectivity, residents face a myriad of challenges in accessing essential services and opportunities. Without internet access, residents in tribal areas have restricted access to up-to-date information on news, weather updates, market prices, and government services. Students from these areas have less access to resource to learn. As there are no cellphone signals it is hard for the villagers to even call ambulance for emergencies. Digital divide is a problem here.

### What We Did

We decided to bring digital connectivity to the village by bring everyone into a network that facilitates communication possible. On top of the same network we ideated to setup some common utility services like media streaming, filesharing, chatting, e-books, wiki, etc., to make them use the network and enable their lifestyle with modern technology. We have set up the a easy to connect wireless network through the village facilitating people to utilize the plug-n-play services setup and made available on the same network. To bring more inclusivity of the village to the rest of the world, we realized internet should also be something the village should be made available with. Hence we utilized the only FTTH connection available in the village to bridge the people over the network with the internet making it possible for the people to communicate with rest of the world



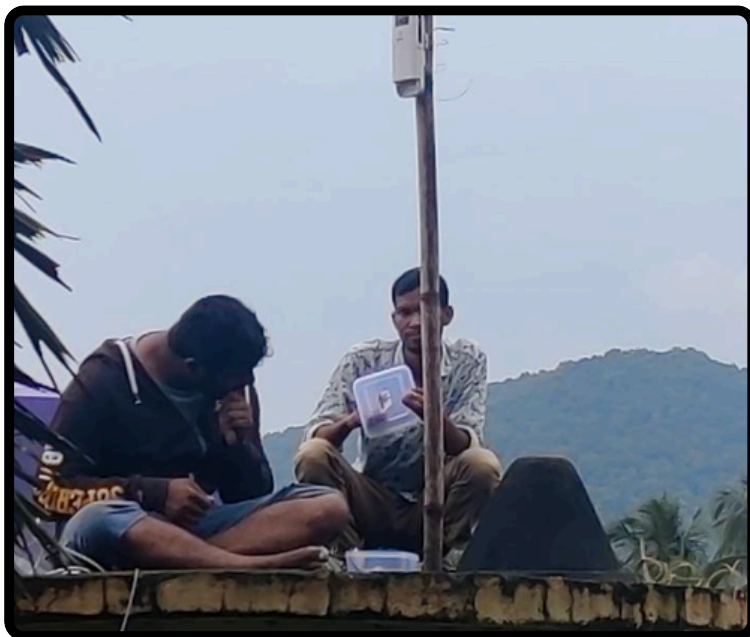
### Challenges We Faced

- Setting up the network alone was a challenging task since the ground ecosystem is full of dense trees and signal jamming entities
- Driving people to utilize the network and making them adapt to the services, achieving decent combability was an evolutionary hurdle
- Internet bandwidth over the FTTH connection is limited which has been a crucial barrier we are trying to overcome

## Technicalities Involved

### Internetless Services Provided

- Digital Library
- Voice Calls(VoIP)
- Chat Messenger
- File Sharing
- Network Radio
- Website Hosting
- Video Streaming
- Calendar



### Impact Created

We are amazed by the progress they have made. Most people learned to use Android phones, accessing the internet, banking with UPI, educational content, entertainment and more. Some learned to edit videos, and even a Youtube channel for showing problems faced by the villagers. Students are using learning resources we provided in the freedom box server. Since the internet which was earlier restricted to a single government office is now spread out to the entire village, various government staff relied on this network to deliver services to the villagers at their doorstep. It is amazing how our little efforts acted as a catalyst to this much change. The good thing is that, cellular companies are slowly expanding their coverage to these villages and people will have an alternative



## Outro



### Contribution by K L Students

The team from KLGLUG @KL University have been instrumental in the activities required for setting up the community digital network (Freedombox). The team spent almost 20 days in the tribal villages.

They were part of the villagers interaction, feasibility survey, network design, wireless connectivity setup, services deployment and facilitation of network connectivity for the users, training the villagers. Enabling a digitally marginalized and excluded village with connectivity and technical services was made possible through this program the team.

### Testimonials by villagers

The villagers of Bhimavaram village have truly been participatory and enthusiastic to know how this new digital intervention can shape their day to day life. Out of several utilities the story of a villager who has been able to start his own content creation through digital means is truly inspiring. Hear from the villager in his own words of what motivated them to take this path up.

<https://youtube.com/shorts/CUQVut5uNYQ>



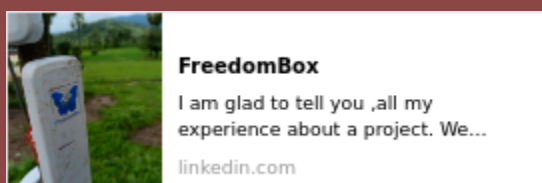
### Blogs by our Volunteers



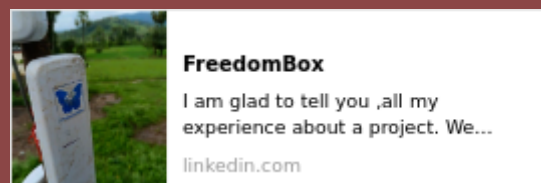
<https://www.swechaap.org/blog/our-trip-to-a-disconnected-world/>



<https://www.swechaap.org/blog/visiting-freedom-box-villages-and-charting-plans-for-community-empowerment/>



<https://www.linkedin.com/pulse/freedombox-khyathi-kancharla/>



<https://www.linkedin.com/pulse/freedombox-karrthikeya-sarma/>

పిల్లల్లా చేసింది. ఇందులోనే స్వేచ్ఛ సంతృప్తి రూట్టినది. పెరి బిడ్డకు లేకుండా తమకు పెరి, ఇంట్లోనే సమయాన్ని కల్పించియున్నందుకు తమకు ప్రజ్ఞా సందేహం లేదా కామరాజు స్వచ్ఛందసంగతి కృతజ్ఞతలు తెలియాయి. సంతృప్తి జ్వరం మూలకం క్రిమీల పాల్గొన్న బాధా ప్రేరణ పుట్టే పిల్లలో మూలకం పుట్టిన తన తండ్రి పాపాలను స్వేచ్ఛ అనే పాపంపై అపయోగించి మూడు రోజులపాటు వసిలేదే. పరివర్తన పొందేవనవచ్చింది. దీనియేమొదటి దశలోనే మనస్సుని క్లిష్టం చేసినట్లుగా ఉంది. బాధా స్వేచ్ఛ పుట్టే 5వ తరగతి నుంచి 10వ తరగతి వరకు ఉన్నది. పిల్లలలో ఆవిర్భవమేదీ పాఠ్యాంశాలను కూడా అందు బాటులోకి తెచ్చుకున్నది. దీని బాధా అయిన పాపాల కల్పం, పిల్లలలో ఆవిర్భవ భావం, దీనిపై భావంలు కల్పంపై ఆవిర్భవ భావం, దీనిపై భావంలు కల్పంపై ఆవిర్భవ భావం.