

## DIGITAL RURAL CONNECTIVITY

**Digital** 14<sup>th</sup> Edition  
samvad  
an open round table  
on  
**Rural Digital Connectivity**

**PROGRAM DETAILS:**  
July 4, 2020,  
Asadh 20, 2077  
Saturday  
1.00 PM - 3:00 PM  
Zoom Room Opens:  
12:45 PM

LIVE ON:

**RESOURCE PERSON & CONTRIBUTORS**

 <b>Dr. Surendra Lal Hada</b> Director RTD Division, NTA	 <b>Mr. Pavan Shakya</b> Executive Director Centre for ICT4D	 <b>Mr. Amrit Nepal</b> Engineer Nepal Telecom
 <b>Mr. Chandra Prakash Gharti</b> Mayor, Bheri Municipality, Jajarkot	 <b>Mrs. Sewa Pathak</b> Director Vianet Communications	 <b>Mr. Chehen Lama</b> Director, Chief Technical Officer Everest Link
 <b>Mr. Ramesh Mahar</b> Senior EHR Associate Bayalpata Hospital, Achham	 <b>Mr. Ganesh Shah</b> Session Chair (Coordinator) Ex. Minister - Science and Technology	

Presented by:

### DIGITAL SAMVAD TEAM

Er. Ganesh Shah | Mr. Nidesh Maskey

Mr. Hempal Shrestha | Mr. Razan Lamsal

Compiled by: Ms. Simana Hitang



June 2021 | जेष्ठ, २०७८

[www.digitalsamvad.org](http://www.digitalsamvad.org)



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## Digital Rural Connectivity

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### SECTION - A: THE BEGINNING

#### Chapter I The Concept Paper

Public link for inputs of this collaborative document: <https://bit.ly/3gioKPB>

#### सन्दर्भ (Context):

The Wi-Fi-based Nepal Wireless connectivity established in 2002 between the neighbouring villages Nangi and Ramche in western Nepal underscores the aspiration of the rural communities to be connected in the digital space. VSAT was highly regulated and limited to urban centres like Kathmandu and Pokhara in that period of the armed conflict in Nepal. Technological advancement, expansion and scaling of the Internet services in every domain of the society has now led to a major paradigm shift in converting this aspiration of being connected to transform these rural demographics in their digital dividend.

This week on July 04, 2020 (Ashar 20, 2077), the Digital Samvad team is hosting an open round-table discussion on the topic “Digital Rural Connectivity”. It strives to transform this forum for initiating this discourse towards developing the digital ecosystem in Nepal through **Digital Samvad**.

#### 1. परिचय (Introduction):

Connectivity is the major means to enable and an important factor in the sustainable development of any society. It denotes the capacity of the people to be connected, either physically or virtually, through means of transport and/or communication. In recent years, digital connectivity has exhibited the potential of being eventuated as the backbone for shaping the agriculture, education, health and other sectors of the rural economy and emerged crucial for the economic growth and poverty alleviation.

Increasing demand for digital technologies and services at the rural communities are struggling to keep up. The relevance of digital connectivity is even more imminent in these communities for sustainable and inclusive development. People tend to apprehend the ability of voice communication over the telecom network as digital capability, however, there still exists a great need to develop a great sense of understanding of digital rural connectivity to eradicate the existing digital divide and digital hardship in the rural context.

## 2. संवाद उद्देश्य (Samvad Objective):

In the above pretext, this edition of the Digital Samvad aims to:

1. Understanding the premises and the notion of digital rural connectivity in the context of Nepal.
2. Mapping the stake and stock taking the status of the digital rural connectivity, including the network pipes and the key stakeholder up to the last-mile.
3. Chart a coherent way ahead for upgrading the digital rural connectivity of Nepal.

## 3. मुख्य सिकाइहरू (Key takeaways)

### 1. सम्बोधन गर्न प्रश्न र मुद्दाहरू (Question/Issues to be Raised/Addressed)

- a. Complete last-mile connectivity, universal access and affordability with the 3G, 4G and Broadband coverage in rural areas of Nepal.
- b. New and emerging technologies, such as artificial intelligence (AI), blockchain, and wireless systems are transforming the way services are delivered being inclusive to poor and marginalized populations.
- c. Status of the reliable connectivity and status of the regulations and regulatory environment for bridging the urban-rural gap in reducing the digital connectivity disparity.
- d. How mobile services and broadband Internet is becoming an important part of many people's lives and a key driver of economic and social development.
- e. How digital technologies are bringing new solutions to complex issues of backwardness existing more prevalently in the rural areas of the hills, mountains and tarai of Nepal.
- f. *<...please add any that you may want to ponder upon .... >*

### 2. सम्बन्धित संसाधन / पुस्तकालय / कागजात (Related Resources / Library/Document)

- a. *<...please add any that you may want to share with others .... >*

## 4. स्रोत व्यक्ति / योगदानकर्ता (Resource Person/ Contributors):

1. **Dr. Surendra Lal Hada**, Director, Infrastructure Division, NTA.
2. **Mr. Pavan Shakya**, Executive Director, Centre for ICT4D.
3. **Er. Amrit Nepal**, Engineer, Nepal Telecom.
4. **Mr. Chandra Prakash Gharti**, Mayor, Bheri Municipality, Jajarkot.
5. **Ms. Sewa Pathak**, Director, Vianet Communications.
6. **Mr. Chehen Lama**, Co-Founder /Chief Technical Officer, Everest Link
7. **Mr. Ramesh Mahar**, Senior EHR Associate, Nyaya Health Nepal, Bayalpata Hospital, Achham.

## 5. परिप्रेक्ष्य सहभागीहरू (प्रस्तावित) (Perspective Participants (Proposed)):

1. Associated organizations:
  - a. NTA
  - b. NTC
  - c. Ncell
  - d. Smart cell
  - e. ISPAN
2. Stakeholders from:
  - a. Local government
  - b. Education Institutions

- c. Banks
- d. Hospital services
- e. Government Service provider
3. Representatives from:
  - a. Worldlink
  - b. Subisu
  - c. Vianet
  - d. ClassicTech
  - e. Sky broadband
  - f. Websurfer
  - g. Broadlink
  - h. TechMinds
  - i. Everest link
  - j. Other service providers...
4. Domain Champions/Experts/Practitioner:
  - a. Mr. Purushotam Khanal, Chairperson, NTA
  - b. Mr. Dilli Adhikari, Managing Director, NTC
  - c. Mr. Bhojraj Bhatta, President, ISPAN
  - d. Dr. Roshani Amatya.
5. Others:
  - a. Researcher
  - b. Academicians
  - c. Teachers
  - d. Students
  - e. Companies
  - f. Public

#### 6. कार्यक्रम विवरण (Program Details):

**Topic: Digital Samvad - Rural Digital Connectivity**

**Date:** 4th July 2020 (Ashar 20, 2077), शनिवार - Saturday

**Time:** 1:00 - 3:30 PM (NPT). Zoom Room opens **12:45 PM** onwards

**Venue:** Online via Zoom - <https://nren.zoom.us/j/67401216494>

**Meeting ID (Zoom Number): 674 0121 6494**

#### KINDLY NOTE:

- No password is required to join the Digital Samvad 2.0. Please connect using the above Zoom link / Zoom ID.
- The Zoom Room opens **03:45 PM** onwards and you are requested to join the meeting at least 10 minutes before the starting time of the digital samvad. While logging in, please turn off your video and mute your audio.
- Kindly provide your proper display Name while participating in the meeting (Your Role | Your Display Name (Designation | Organisation) | Your Country). If you want to disclose your organisation or designation, please do so within brackets after your Display Name or share about yourself in the chatbox.
- To share your views, please raise your hand in the participant list section and seek facilitators approval before speaking or write a message requesting for the same from the facilitator in the chatbox of the Zoom application.



## Digital Rural Connectivity

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### Chapter II

### The Samvad Design & Program Outline

Time (Mins)	Particulars	Remarks
00 - 05	Opening, Introduction, and Welcome.	Mr. Manohar Bhattarai
05 - 15	The objective highlight of the 14th edition of the Digital Samvad.	Mr. Hempal Shrestha
15 - 25	<b>Samvad Base:</b> Base presentation on “Connecting the rural communities digitally”	Mr. Pavan Shakya
25 - 35	Base presentation on “Status of the last mile of the digitally connected Nepal”	Er. Amrit Nepal
35 - 45	Base presentation on “Rural Digital Connectivity and NTA”	Dr. Surendra Lal Hada
45 - 60	Resource Persons sharing their opening remarks, inputs, insights on the samvad objective and issues raised by the base presentations briefly (3-4 minutes each)	Co-facilitated by: * Mr. Hempal Shrestha * Mr. Razan Lamsal
60 - 90	<b>The Samvad:</b> Follow-up Interaction among the Resource Persons and domain champions on samvad topic of digital rural connectivity of Nepal.	
90 - 120	Open floor discussion and follow-up samvad between the participants and resource persons.	
120 -130	<b>Samvad Conclusion:</b> Concluding remarks from all the Resource Persons- (1-2 minutes each)	Each Resource Person

130 -140	Summary of the Digital Samvad	Mr. Razan Lamsal
140 - 145	Closing Remarks	Mr. Purushottam Khanal
145 - 150	Appreciation and Closing of the Interaction	Er. Ganesh Shah
Onwards	Open-mic conversation and networking among the participants.	All participants can talk to each other.



## Digital Rural Connectivity

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### Chapter III

#### Samvad Invitation & Communication

##### A. Invitation to Resource Persons and Participants

**Subject: Invitation to join Digital Samvad - an open round table on “Digital Rural Connectivity” this Saturday @ 1:00 PM.**

**Greetings!**

Invitation to join Digital Samvad - an open round table on “**Digital Rural Connectivity**” this **Saturday, July 04, 2020 (Ashar 20, 2077)**, from **1:00 - 3:30 PM (NPT)** via Zoom **as a Resource Person**.

##### Program Details:

**Topic: Digital Samvad - Rural Digital Connectivity**

**Date:** 4th July 2020 (Ashar 20, 2077), शनिवार - Saturday

**Time:** 1:00 - 3:30 PM (NPT), Zoom Room opens **12:45 PM** onwards

**Venue:** Online via Zoom - <https://nren.zoom.us/j/67401216494>

**Meeting ID (Number): 674 0121 6494**

This is the 14th edition of Digital Samvad where we try to spur discussion and draw lessons from the experience of our key resource person and domain experts. We engage with the key stakeholders for conversation and dialogue to find insights for the way ahead to 'turn the sparks into a real opportunity to do things right for the future'.

Increasing demand for digital technologies and services at the rural communities are struggling to keep up. The relevance of digital connectivity is even more imminent in these communities for sustainable and inclusive development. People tend to apprehend the ability of voice communication over the telecom network as digital capability, however, there still exists a great need to develop a great sense of understanding of digital rural connectivity to eradicate the existing digital divide and digital hardship in the rural context. In this pretext, this session of Digital Samvad will attempt to:

1. Understanding the premises and the notion of digital rural connectivity in the context of Nepal.



2. Mapping the stake and stock taking the status of the digital rural connectivity, including the network pipes and the key stakeholder up to the last-mile.
3. Chart a coherent way ahead for upgrading the digital rural connectivity of Nepal.

Kindly find attached herewith the concept note for your kind perusal. If you require assistance or need more information, please visit the Google docs: <https://bit.ly/3gioKPB>

We look forward to e-seeing you this Saturday afternoon!!

Kind Regards

### **Digital Samvad Team**

(Er. Ganesh Shah, Hempal Shrestha, Razan Lamsal, Nidesh Maskey)

- *PS 1. : We would like to thank everyone who attended our previous Digital Samvad, which was a tremendous success filled with engaging and productive discussions. If you want a recap of our last Samvad, kindly find the online document <https://bit.ly/3hGOird> capturing the major highlights of the discussion.*
- *PS 2: NOTE: Please connect using the link (Zoom ID) at least 10 mins. prior to the digital samvad time and turn off your video and mute your audio. Zoom Room opens **12:45 PM** onwards. Kindly provide your proper display Name while participating in the meeting. To share your views, please use the chat function and raise your hand in the participants' list to speak.*

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## Digital Rural Connectivity

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### SECTION - B: THE SAMVAD

#### Chapter IV

#### "Budgeting for Digitalizing Nepal" - The Samvad

##### 0. Samvad Summary (Nepali):

इन्टरनेट सस्तो र गुणस्तरिय हुनुपर्नेमा सरोकारवालाको चासो, करछुट गर्न आइस्पानको माग २०७७ असार २१, काठमाडौं ।

पछिल्लो समय नेपालमा पनि इन्टरनेट प्रविधिको प्रयोग बढिरहेको छ । इन्टरनेट प्रयोगकर्ता बढेसँगै डिजिटल सर्भिसेस, ई-कमर्स, अनलाइन शिक्षा, डिजिटल स्वास्थ्य र डिजिटल कृषिको आवश्यकता र माग पनि बढिरहेको छ । दूरसञ्चार प्राधिकरणले प्रकाशित गरेको गत वैशाख २०७७ सम्मको तथ्यांक हेर्ने हो भने नेपालमा ७२ प्रतिशतले इन्टरनेट प्रयोग गरिरहेका छन् । लगभग ५४ प्रतिशत मानिसले मोबाइल डेटाकै प्रयोग गरेर इन्टरनेट चलाइरहेका छन् । तर अहिले पनि ग्रामीण र विकट क्षेत्रहरूमा इन्टरनेटको पहुँच पुग्न सकेको छैन ।

यसैबीच असार २० गते आयोजित डिजिटल संवाद कार्यक्रममा बोल्दै नेपाल दूरसञ्चार प्राधिकरणका अध्यक्ष पुरुषोत्तम खनालले ग्रामीण क्षेत्रमा इन्टरनेटको विस्तार मुख्य प्राथमिकतामा रहेको बताए । ग्रामीण दूरसञ्चार कोष मार्फत विभिन्न परियोजना अन्तर्गत कामहरू भइरहेको र ४१ जिल्लाका सम्पूर्ण वडाहरूमा इन्टरनेट विस्तार गरिएको उनको भनाइ छ । फाइबर विस्तारको काममा सडक विभाग र विद्युत् प्राधिकरणसँग समन्वय हुन नसक्दा काममा ढिलाइ भएको र पछिल्लो समय कोरोना, लकडाउन र केही परियोजनामा अदालती प्रक्रिया जस्ता कारणले मध्यपहाडी लोकमार्ग र अन्य क्षेत्रमा केही ढिला हुन गएको अध्यक्ष खनालले स्वीकारे ।

संवादमा बोल्दै पूर्वमन्त्री गणेश शाहले अब इन्टरनेट आधारभूत आवश्यकता जस्तो भइसकेको हुँदा इन्टरनेट सस्तो र भरपर्दो हुनुपर्ने औँल्याए । डिजिटल नेपाल बनाउने सरकारले तयारी गरे पनि इन्टरनेटको पहुँच विस्तार नभएसम्म धेरै काम अघि नबढ्ने हुँदा ग्रामीण क्षेत्रमा डिजिटल कनेक्टिभिटीको पहुँच विस्तारमा जोड दिनुपर्ने शाहले बताए । आइसिटी विज्ञ मनोहर भट्टराईले डिजिटल रूपान्तरणको लागि इन्टरनेट पहिलो शर्त भएको बताए । एआई, आइओटी, बिगडेटा जस्ता नयाँ प्रविधिहरू पनि आइरहेको हुँदा डिजिटल डिभाइड बढ्नेतर्फ सचेत हुँदै 'मिनिडफुल' ब्रोडब्याण्ड कनेक्टिभिटीमा जोड दिनुपर्ने उनको भनाइ थियो ।

डिजिटल संवाद कार्यक्रममा बोल्दै नेपाल टेलिकमका अध्यक्ष डिल्ली अधिकारीले पछिल्लो समय ग्रामीण क्षेत्रमा इन्टरनेटको पहुँच विस्तारमा उल्लेख्य प्रगति भइरहेको र टेलिकमले विभिन्न योजनाहरू बनाएर काम गरिरहेको बताए । विभिन्न ३५ सय टावरहरू मार्फत फोरजी विस्तार भइरहेको हुँदा यसले डिजिटल रूपान्तरणमा फड्को मार्ने अधिकारीले बताए । पछिल्लो समय नेपाल टेलिकमले दूरसञ्चार कोष अन्तर्गतको परियोजनामा पनि प्राथमिकताको साथ काम गरिरहेको हुँदा अब इन्टरनेटको प्रोडक्टिभिटी र उपयोगितामा पनि जोड दिनुपर्ने उनको भनाइ थियो ।

यसैगरी दूरसञ्चार प्राधिकरण अन्तर्गत इन्फ्रास्ट्रक्चर डिभिजनका निर्देशक डा। सुरेन्द्र हाडाले अब स्थानीय सरकारसँग समन्वय गर्दै काम गर्नुपर्ने आवश्यकता महशुस भएको बताए । ७०१ स्थानीय तहमा इन्टरनेट विस्तार भइसके पनि अझै उच्च गतिको मिनिडफुल इन्टरनेट विस्तारमा धेरै काम गर्नुपर्ने हाडाको भनाइ

थियो । कार्यक्रममा नेपाल टेलिकमका इन्जिनियर अमृत नेपालले टेलिकमले विस्तार गरिरहेको इन्टरनेट र विभिन्न प्रविधिहरूको बारेमा जानकारी गराए ।

कार्यक्रममा आइस्पानका अध्यक्ष भोजराज भट्टले सरकारले ग्रामीण क्षेत्रमा पहुँच विस्तार गर्न सेवा प्रदायकलाई विभिन्न किसिमले प्रोत्साहन गर्नुपर्ने बताए । उनले इन्टरनेटमा कर बढी भएको, ग्रामीण क्षेत्रमा इन्टरनेट विस्तारको लागि छुट्टै फ्रिक्वेन्सी ब्याण्ड उपलब्ध गराउनुपर्नेमा जोड दिए । भ्यानेट कम्युनिकेसनका निर्देशक सेवा पाठकले ग्रामीण क्षेत्रमा इन्टरनेट विस्तारको लागि लाइसेन्स ब्याण्ड र इन्फ्रास्ट्रक्चर सेयरिडमा जानुपर्ने बताइन् । उनले इकोसिस्टम विकास गर्न स्थानीय स्तरमा उद्यमशीलताको विकास बढाउनुपर्नेमा जोड दिइन् । एभरेष्ट लिंकका सिटिओ चेछन लामाले ग्रामीण क्षेत्रमा इन्टरनेट विस्तार सहज नभएको र यसका लागि स्थानीय बासिन्दालाई बढी अपनत्व हुनेगरी सेवा विस्तार गर्नुपर्नेमा जोड दिए । देशभरमा सयौं स्थानीय निकायका आइटी अफिसर र अन्य सरोकारवालामाझ बोल्दै भेरी नगरपालिकाका मेयर सिपी घर्तीले इन्टरनेटको समस्या र अभावले स्थानीय स्तरमा बजेटमा दिइएको स्मार्टपालिका बनाउने नाराहरू पूरा गर्न नसकिएको बताए । सेवा प्रदायकहरूले गुणस्तरीय सेवामा जोड दिनुपर्ने र स्थानीय निकायसँग समन्वय गरेर काम गर्नुपर्ने मेयर घर्तीको भनाइ थियो । आइसिटी फोरडीका कार्यकारी निर्देशक पवन शाक्यले पिपिपि मोडसँगै स्थानीय व्यक्तिहरूलाई सक्रिय बनाउँदै ग्रामीण क्षेत्रमा इन्टरनेट विस्तार गर्न सके भरपर्दो हुने बताए । इन्टरनेट विस्तार गर्न नसकिने स्थानमा इन्ट्रानेट र ओपन सोर्स प्लेटफर्महरूबाट पनि सेवा दिन सकिने शाक्यले सुझाव दिए । यसैगरी वयलपाटा अस्पतालका सिनियर इएचआर रमेश महरले विभिन्न समस्या हुँदाहुँदै पनि इन्टरनेट हब बनाउने काम गरिरहेको अनुभव सुनाए । कार्यक्रममा हुम्ला, धनकुटा रुकुमका स्थानीय पालिकाका आइटी अफिसहरूले इन्टरनेटको बारेमा अनुभव सुनाएका थिए ।

इन्टरनेटको कर घटाऔं र इन्फ्रास्ट्रक्चर सेयरिडमा जाऔं : आइस्पान

सरकारले इन्टरनेटमा लगाएको कर महँगो भएको आइस्पानको गुनासो छ । आगामी आर्थिक वर्षमा सेवा प्रदायकलाई मर्मतसम्भारमा ५० प्रतिशत कर छुट गरे पनि यो पर्याप्त नभएको आइस्पानका अध्यक्ष भोजराज भट्टले डिजिटल संवादमा बताए । नेपालमा विभिन्न किसिमका करहरू लगाएर इन्टरनेट महँगो बनाएको र ग्रामीण क्षेत्रमा विस्तार गर्न सेवाप्रदायकलाई प्रोत्साहन नगरिएको उनले गुनासो गरे । यसैगरी इन्फ्रास्ट्रक्चर सेयरिड, ग्रामीण क्षेत्रमा फ्रिक्वेन्सी ब्याण्ड उपलब्ध गराउनुपर्ने र आर्टिडिएफको सही परिचालन गरिनुपर्ने विषयमा इन्टरनेट सेवा प्रदायकले जोड दिएको उनले बताए ।

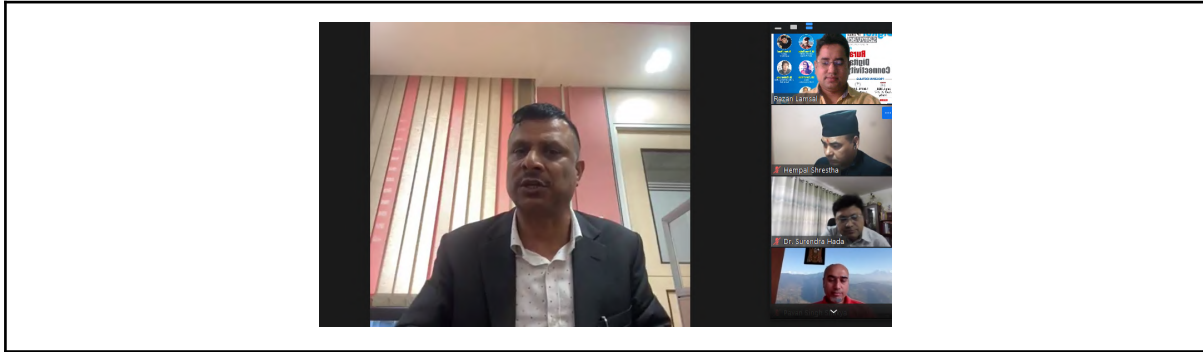
ग्रामीण दूरसञ्चार कोषको रकम दुरुपयोग भएको छैन : प्राधिकरण

सरकारले ग्रामीण दूरसञ्चार कोषको रकम राजस्वमा तानेको र रकमको सदुपयोग नभएको गुनासो आइरहेको बेला प्राधिकरणले बाहिर भनिएजस्तो दुरुपयोग नभएको प्रष्ट पारेको छ । डिजिटल संवादमा बोल्दै नेपाल दूरसञ्चार प्राधिकरणका अध्यक्ष पुरुषोत्तम खनालले कोष अन्तर्गत थुप्रै योजनाहरू अघि बढिरहेको र आधा बढी जिल्लाहरूमा सबै स्थानीय तहसम्म इन्टरनेट विस्तार गरिसकेको जानकारी दिए । विभिन्न चरणमा प्रदेश, क्षेत्र र पूर्वपश्चिम मध्यपहाडी लोकमार्गमा फाइबर विस्तार गर्दै २ वर्षसम्म स्थानीय निकाय, विद्यालय र स्वास्थ्य केन्द्रहरूमा निःशुल्क इन्टरनेट प्रदान गर्ने काम सफलतापूर्वक अघि बढिरहेको खनालले जानकारी दिए । यद्यपि कतिपय स्थानमा सडक विभाग र विद्युत् प्राधिकरणको कारण काम अडकिएको, सुदूरपश्चिममा चाँडै नयाँ टेण्डरबाट शुरु हुन लागेको र कोरोनाको कारण भएको लकडाउनले इन्फ्रास्ट्रक्चर विस्तारमा ढिलाइ भएको अध्यक्ष खनालले स्वीकार गरे ।

ग्रामीण दूरसञ्चार विकास कोष अन्तर्गत सञ्चालित परियोजनामार्फत ४१ जिल्लाका वडा वडामा इन्टरनेट सेवा पुगेको प्राधिकरणले बताएको छ । ग्रामीण दूरसञ्चार प्राधिकरणका निर्देशक डा. सुरेन्द्र हाडाले डिजिटल संवाद भइरहेको काम र प्रगति पेश गर्दै ४१ जिल्लाका सबै स्थानीय तहमा इन्टरनेट विस्तार भइरहेको बताए । प्राधिकरणले कोषको रकम खर्चेर विभिन्न १८ वटा प्याकेजमा देशभर इन्टरनेट सेवा विस्तार गर्ने कार्यक्रम सञ्चालन गरिरहेको छ, जसअन्तर्गत ११ परियोजनाको काम सम्पन्न भएको प्राधिकरणले बताएको छ ।

## 1. Samvad Knowledge Base

### A. *Samvad Sandarbha* Presentation on “Digital Rural Connectivity”



## 2. Samvad Highlights

पछिल्लो समय नेपालमा पनि इन्टरनेट प्रविधिको प्रयोग बढिरहेको छ । इन्टरनेट प्रयोगकर्ता बढेसँगै डिजिटल सर्भिसेस, ई-कमर्स, अनलाइन शिक्षा, डिजिटल स्वास्थ्य र डिजिटल कृषिको आवश्यकता र माग पनि बढिरहेको छ । दूरसञ्चार प्राधिकरणले प्रकाशित गरेको गत वैशाख २०७७ सम्मको तथ्यांक हेर्ने हो भने नेपालमा ७२ प्रतिशतले इन्टरनेट प्रयोग गरिरहेका छन् । लगभग ५४ प्रतिशत मानिसले मोबाइल डेटाकै प्रयोग गरेर इन्टरनेट चलाइरहेका छन् । तर अहिले पनि ग्रामीण र विकट क्षेत्रहरूमा इन्टरनेटको पहुँच पुग्न सकेको छैन ।

यसैबीच असार २० गते आयोजित डिजिटल संवाद कार्यक्रममा बोल्दै नेपाल दूरसञ्चार प्राधिकरणका अध्यक्ष पुरुषोत्तम खनालले ग्रामीण क्षेत्रमा इन्टरनेटको विस्तार मुख्य प्राथमिकतामा रहेको बताए । ग्रामीण दूरसञ्चार कोष मार्फत विभिन्न परियोजना अन्तर्गत कामहरू भइरहेको र ४१ जिल्लाका सम्पूर्ण वडाहरूमा इन्टरनेट विस्तार गरिएको उनको भनाइ छ । फाइबर विस्तारको काममा सडक विभाग र विद्युत् प्राधिकरणसँग समन्वय हुन नसक्दा काममा ढिलाइ भएको र पछिल्लो समय कोरोना, लकडाउन र केही परियोजनामा अदालती प्रक्रिया जस्ता कारणले मध्यपहाडी लोकमार्ग र अन्य क्षेत्रमा केही ढिला हुन गएको अध्यक्ष खनालले स्वीकारे ।

संवादमा बोल्दै पूर्वमन्त्री गणेश शाहले अब इन्टरनेट आधारभूत आवश्यकता जस्तो भइसकेको हुँदा इन्टरनेट सस्तो र भरपर्दो हुनुपर्ने औँल्याए । डिजिटल नेपाल बनाउने सरकारले तयारी गरे पनि इन्टरनेटको पहुँच विस्तार नभएसम्म धेरै काम अघि नबढ्ने हुँदा ग्रामीण क्षेत्रमा डिजिटल कनेक्टिभिटीको पहुँच विस्तारमा जोड दिनुपर्ने शाहले बताए । आइसिटी विज्ञ मनोहर भट्टराईले डिजिटल रूपान्तरणको लागि इन्टरनेट पहिलो शर्त भएको बताए । एआई, आइओटी, बिगडेटा जस्ता नयाँ प्रविधिहरू पनि आइरहेको हुँदा डिजिटल डिभाइड बढ्नेतर्फ सचेत हुँदै 'मिनिडफुल' ब्रोडब्याण्ड कनेक्टिभिटीमा जोड दिनुपर्ने उनको भनाइ थियो ।

डिजिटल संवाद कार्यक्रममा बोल्दै नेपाल टेलिकमका अध्यक्ष डिल्ली अधिकारीले पछिल्लो समय ग्रामीण क्षेत्रमा इन्टरनेटको पहुँच विस्तारमा उल्लेख्य प्रगति भइरहेको र टेलिकमले विभिन्न योजनाहरू बनाएर काम गरिरहेको बताए । विभिन्न ३५ सय टावरहरू मार्फत फोरजी विस्तार भइरहेको हुँदा यसले डिजिटल रूपान्तरणमा फड्को मार्ने अधिकारीले बताए । पछिल्लो समय नेपाल टेलिकमले दूरसञ्चार कोष अन्तर्गतको परियोजनामा पनि प्राथमिकताको साथ काम गरिरहेको हुँदा अब इन्टरनेटको प्रोडक्टिभिटी र उपयोगितामा पनि जोड दिनुपर्ने उनको भनाइ थियो ।

यसैगरी दूरसञ्चार प्राधिकरण अन्तर्गत इन्फ्रास्ट्रक्चर डिभिजनका निर्देशक डा. सुरेन्द्र हाडाले अब स्थानीय सरकारसँग समन्वय गर्दै काम गर्नुपर्ने आवश्यकता महशुस भएको बताए । ७०१ स्थानीय तहमा इन्टरनेट विस्तार भइसके पनि अझै उच्च गतिको मिनिडफुल इन्टरनेट विस्तारमा धेरै काम गर्नुपर्ने हाडाले भनाइ थियो । कार्यक्रममा नेपाल टेलिकमका इन्जिनियर अमृत नेपालले टेलिकमले विस्तार गरिरहेको इन्टरनेट र विभिन्न प्रविधिहरूको बारेमा जानकारी गराए ।

**A. Samvad Banner:**

**Digital** 14<sup>th</sup> Edition  
**samvad**  
an open round table  
on  
**Rural Digital Connectivity**

**PROGRAM DETAILS:**

July 4, 2020, Asadh 20, 2077 Saturday  
1.00 PM - 3:00 PM  
Zoom Room Opens : 12:45 PM

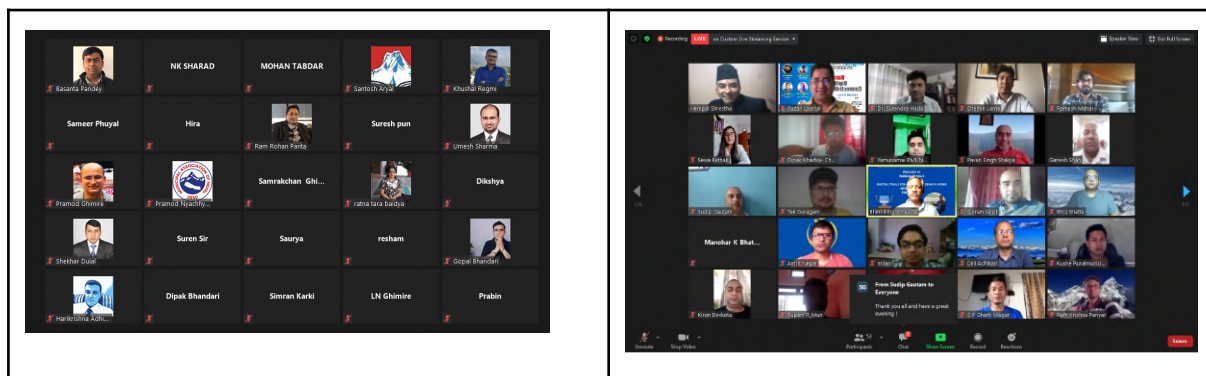
**RESOURCE PERSON & CONTRIBUTORS**

- Dr. Surendra Lal Hada**  
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- Mr. Amrit Nepal**  
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- Mr. Chandra Prakash Gharti**  
Mayor,  
Bheri Municipality, Jajarkot
- Mrs. Sewa Pathak**  
Director  
Vianet Communications
- Mr. Chehen Lama**  
Director, Chief Technical Officer  
Everest Link
- Mr. Ramesh Mahar**  
Senior EHR Associate  
Bayalpata Hospital, Achham
- Mr. Ganesh Shah**  
Session Chair (Coordinator)  
Ex. Minister - Science and Technology

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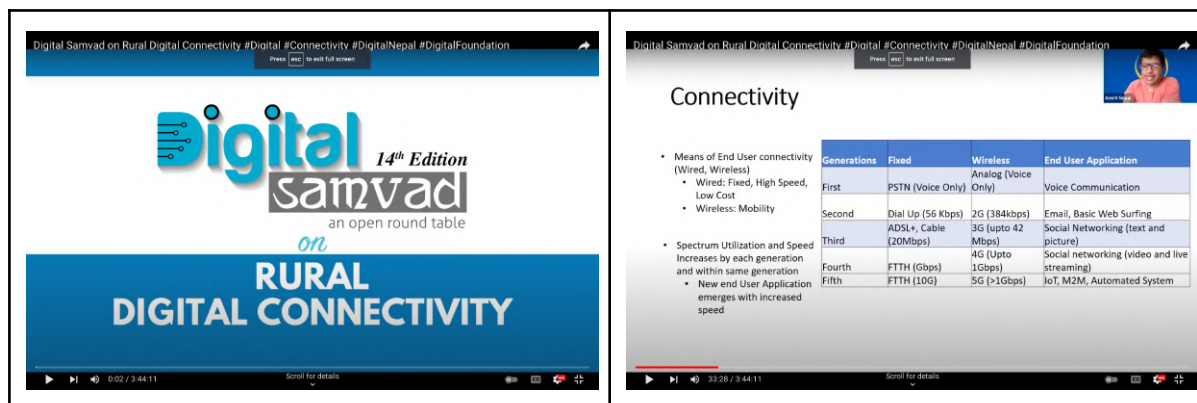
**B. Samvad ZoomShots:**



**ZoomShots from the Main Event on ZOOM | Digital Samvad 1.0**

## C. Youtube Video Shots

Link: [https://www.youtube.com/watch?v=zmr2k\\_lwk0M](https://www.youtube.com/watch?v=zmr2k_lwk0M)



## D. Samvad Interactions, Comments, Feedback and Suggestions

*Note: No edits, spelling corrections or modifications have been committed to any chats, views, or opinions. All the interactions, suggestions, feedback, and comments are presented as it is.*

12:14:35 From Hempal Shrestha : Dear Participants, Thank you for joining us in the Digital Samvad. The host is currently doing technical preparation and will onboard you after 12:45 PM

12:14:50 From Hempal Shrestha : Dear Participants, Thank you for joining us in the Digital Samvad. The host is currently doing technical preparation and will onboard you after 12:45 PM - Host

12:32:33 From Hempal Shrestha : Dear Participants, Thank you for joining us in the Digital Samvad. The host is currently doing technical preparation and will onboard you after 12:45 PM - Host

12:41:01 From Hempal Shrestha : Dear Participants, Thank you for joining us in the Digital Samvad. The host is currently doing technical preparation and will onboard you after 2-3 minutes-Host

12:51:53 From Prakash : namaste to all

12:52:29 From kolhabi mun Sanjeev gupta : hellow everyone, namaste from kolhabi mun, bara p2...sanjeev gupta

12:53:53 From Dipendra Punmagar : sir namaste from Rolpa

12:54:07 From गोपाल ओली मुसिकोट नगरपालिका रुकुम (पश्चिम) : Namaste everyone,

12:54:47 From BB Khadka : From Salyan hai

12:56:48 From Hempal Shrestha : Namaste All

12:56:55 From Hempal Shrestha : Welcome All

12:57:21 From Gobinda Thapa : Namaskar sabijanalai!

12:57:21 From Bharat Shrestha : namaste Everyone

12:57:31 From Bharat Shrestha : and goodafternoon

12:57:35 From Ramesh Mahar : Thank you @Hempal sir

13:03:16 From Ganesh Shah To Hempal Shrestha(Privately) : please write your email address

13:04:15 From Ganesh Shah : please write your email address and mob

13:04:48 From Pavan Singh Shakya : Pavan Shakya, Centre for ICT for Development,  
9851135158

13:04:48 From Sweta Das(AGNISAIR KRISHNA SAWRAN RURAL MUN) : asks.gapa@gmail

13:04:58 From Nutan Shrestha : nutanshrestha212@gmail.com/9801076037

13:05:02 From Pavan Singh Shakya : **pavan.s@ict4dnepal.org**

13:05:03 From प्रज्वल देवकोटा : ito.kwholasotharmun@gmail.com, Mob No:9840069568

13:05:15 From तारकेश्वर गाउँपालिका : info@tarakeshwormunnuwakot.gov.np/9851231192

13:05:28 From Hempal Shrestha : Please do visit live Google docs: <https://bit.ly/3gioKPB> for your feedback as well

13:05:32 From Birendra Parajuli PLGSP PPIU Pokhara : birendraparajuli@gmail.com

13:05:37 From Ravindra Sah : ravindra.sah570@gmail.com / 9843704711

13:05:42 From Sunaina Ghimire Pandey To Hempal Shrestha(Privately) : can hear voice

13:05:44 From Prabin chand, Salyan : netcomsln@gmail.com/9857822131

13:05:48 From milan : tripathimilan28@gmail.com/9843226481

13:05:54 From Dipak Khadka- Chhathar Jorpati RMUN : ito.chhatharjorpatirmun@gmail.com  
9849386029

13:05:55 From Sunaina Ghimire Pandey To Hempal Shrestha(Privately) : can't hear voice

13:05:58 From Hem Thapa-( Badimalika Municipality) -IT Officer :  
info@badimalikamun.gov.np

13:06:03 From Ram Kishor Rawal : hritik.rawal@gmail.com 9858024021

13:06:06 From Hempal Shrestha To Sunaina Ghimire Pandey(Privately) : We ca hear Sunaina ji

13:06:10 From BODH PRAKASH PRADHAN : pradhanbodh@gmail.com/Bodh Prakash  
Pradhan/9842371533

13:06:16 From Hempal Shrestha To Sunaina Ghimire Pandey(Privately) : can you check your audio settings

13:06:24 From Santosh Hamal : Santosh hamal (Narainapur Rural Municipality, Banke),  
ito.narainapurmun@gmail.com, 9848108962

13:06:24 From Shailendra Paudel : sha\_pal2009@yahoo.com/9856060675



13:06:24 From Tila Rural Municipality : amitbasnet5050@gmail.com 9868265037

13:06:33 From Laxminiya R M : ito.laxminiyamun@gmail.com 9819660595

13:06:44 From subash pandey : suvaspandey2054@gmail.com 9867305945

13:06:45 From Dixon Chaudhary : dixonchaudhary7@gmail.com 9812881133

13:07:00 From Aalital Rm : nabrajojha568@gmail.com 9823054921

13:07:08 From Er.Deepak Rawal : deepak@mercantile.com.np  
9841346455

13:07:10 From Yamunamai RMUN, Rautahat : ito.yamunamaimun@gmail.com  
9855044613

13:07:13 From Rakish Joshi : ito.mahakalimun@gmail.com  
9858776676

13:07:26 From Ajanta Dhakal : ito.bhanumun@gmail.com  
9843704300

13:08:01 From Paterwa Sugauli Rural Municipality Parsa : ito.paterwasugaulimun@gmail.com  
9860688912

13:08:16 From kolhabi mun Sanjeev gupta : ito@kolhabimun.gov.np

13:08:22 From kolhabi mun Sanjeev gupta : 9855049181

13:08:32 From Hem Thapa-( Badimalika Municipality) -IT Officer :  
ito.badimalikamun@gmail.com 9841796566 , info@badimalikamun.gov.np

13:08:50 From Sunaina Ghimire Pandey To Hempal Shrestha(Privately) : done thanks

13:09:00 From Topendra : ito.chingadmun@gmail.com 9843127325

13:09:03 From Govinda Rokaya, PLGSP, PCGG, Sudurpashchim : Ramro sanga suniyena !!

13:09:32 From Sweta Das(AGNISAIR KRISHNA SAWRAN RURAL MUN) :  
ito.agnisairkrishnasabranmun@gmail.com mob 9815730327

13:09:59 From Suresh K.Y. ITO Rajbiraj MUN : ito.rajbirajmun@gmail.com 9841969090  
Suresh K Yadav -ITO -Rajbiraj MUN Saptari

13:09:59 From Santosh Kumar Mahato : ई. संतोष कुमार महतो  
आईटी अधिकृत  
नेपाल विकास अनुसन्धान प्रतिष्ठान  
पुल्चोक, ललितपुर  
फोन : +९७७ -१ -५५५४९७५ , ५५५३७३६२

मोवाईल : +९७७-९८४४०९१३८८

ईमेल: santosh@ndri.org.np

- 13:10:06 From (Yeti)Rachindra Raj Panthi : wppremier786@gmail.com /cell no 9840050261
- 13:10:16 From Jagannathrmun ITO srijana shahi : info@jagannathmun.gov.np
- 13:10:28 From Padam Raj Regmi : pr.regmi2000@gmail.com
- 13:11:38 From Jagannathrmun ITO srijana shahi : srijanaa8@gmail.com contact num  
9860279675
- 13:12:18 From Govinda Rokaya, PLGSP, PCGG, Sudurpashchim To Hempal Shrestha(Privately) :  
Please increase your voice
- 13:12:42 From Mr.Dilip Pratap Khand : namaste to everyone.
- 13:13:07 From Nepali Prajjwal : info@ictaward.org, 9813320266
- 13:13:27 From Sahadev Chaudhary : pressnepali@gmaail.com
- 13:15:22 From Sushan Kattel : sushankattel@gmail.com, 9862699011
- 13:16:22 From Dipendra Punmagar : nayanepal303@gmail.com  
9851229852
- 13:17:40 From Arjun Pokhrel : pokhrlarjun01@gmail.com
- 13:17:58 From Prakash Aryal : Dear sir, we want to connect all the municipality's area to  
broad band internet connectivity.so that every household and different office are connected to this.
- 13:18:08 From Devendra Adhikari : adevendra2468@gmail.com  
9825942097
- 13:19:16 From धिरेन्द्र चन्द सोडारी : Dhirendra Chand Sodari  
Founder  
FEST(Future Education Of Science & Technology)  
dhirendratkp2011@gmail.com  
9848430071
- 13:19:34 From Abhimanyu Pandey : Q1: On what basis does NEA charge pole rental? if that  
charge is reduced or completely nullified, would that help in both backhaul and xTTH (since  
electricity has reached 95% of Nepal's land mass). The rental charges are antithetical to affordability.
- 13:21:22 From Sahadev Chaudhary : please email me this presentation
- 13:21:29 From Sahadev Chaudhary : @pressnepali@gmail.com
- 13:22:13 From Bogatan Gaupalika : amiasbista2017@gmail.com
- 13:22:34 From Bogatan Gaupalika : phone no 9865746187
- 13:22:48 From dhunibeshi mun : ito1.dhunibeshi@gmail.com
- 13:23:25 From Arjunchaupari RM : Hello Everyone.ito.arjunchauparimun@gmail.com

13:23:35 From Manisha Koirala : sir hajur ko screen alik milayera share garnu na milcha bhani. adhi jasto dekhinna

13:25:16 From Birendra Parajuli PLGSP PPIU Pokhara : सेवा प्रदायकहरूले गुणस्तरीय सेवा दिन नसक्नुमा के समस्या छन् ? नागरिक सँग रकम असुल्ने तर निर्धारित गुणस्तरको सेवा दिन नसक्नुमा उनीहरूलाई कसरी जिम्मेवार बनाउन सकिन्छ ?

13:25:17 From Niraj Bhandari-STN : +91 97171 37477 Keshav Sharma Bluetown

<https://www.youtube.com/watch?v=1HJ8mNloJhc>

<https://bluetown.com/>

For Nepal Hridaya Kadel +9779840051763

13:26:03 From Hempal Shrestha To Manisha Koirala(Privately) : @Manisha ji, we can see the creen okay, can you check your monitor please

13:26:49 From sudhir Paudel SIYARI RM Rupandehi : 9847023185, paudel\_sudhir@yahoo.com

13:26:56 From Birendra Parajuli PLGSP PPIU Pokhara : गाउँपालिका र नगरपालिकाका विद्यालयहरूमा, स्वास्थ्य संस्थाहरू र कार्यालयहरूलाई नेपाल सरकारले निशुल्क कनेक्टिभिटी दिन सक्छ कि सक्दैन ?

13:29:08 From Birendra Parajuli PLGSP PPIU Pokhara : गाउँपालिकाहरू, नगरपालिकाहरू पनि कनेक्टिभिटीमा सहयोग गर्न तयार छन् तर दुर सञ्चार प्राधिकरण यसबाहेर गम्भिर नदेखिएको किन होला ?

13:30:19 From Kailash Karki : Insightful. Thank you for the presentation. @pavan shakya

13:34:06 From Abhimanyu Pandey : Q2. Is transmission keeping up with applications? Currently even youtube hardly works in rural Nepal.

13:36:18 From Hempal Shrestha : Dear Participants in Waiting room, could you kindly provide your proper actual Name for easing the host to onboard you to the Samvad hall - Host

13:38:39 From simkot RM ITO : गाउँपालिकाहरू, नगरपालिकाहरू पनि कनेक्टिभिटीमा सहयोग गर्न तयार छन् तर दुर सञ्चार प्राधिकरण यसबाहेर गम्भिर नदेखिएको किन होला ?

13:39:01 From धिरेन्द्र चन्द सोडारी : <https://www.facebook.com/fest.np>

13:40:28 From Ved Kafle : Questions to the distinguished speaker from NTC: In many countries, network function virtualization and software defined networking technology supporting 4G infrastructures are deployed so that they can be reconfigured easily by updating software when migrating to 5G service and saving the cost of migration. Has NTC taken this vision into consideration when deploying 4G network infrastructure?

13:42:00 From Binod chandra Shrestha : गाउँपालिका र नगरपालिकाका सामूदायिक माध्यामिक विद्यालयहरूमा, सामूदायिक स्वास्थ्य संस्थाहरू र गाउँपालिका र नगरपालिकाका कार्यालयहरू तथा वडा

कार्यालयहरुमा ब्रोडब्याण्ड कनेक्टिभिटी २ बर्षको लागि निशुल्क प्रदान गर्न ग्रामिण दूरसञ्चार बिकास कोष परिचालन गरी नेपाल दूरसञ्चार प्राधिकरणबाट १८ वटा प्याकेजहरुमा परियोजनाहरु सञ्चालित छन् ।

13:42:55 From Abhimanyu Pandey : @hempal ji: can you share all slides or place them on shared doc?

13:43:02 From doodhpokhari Municipality : ग्रामिण दुर संचार को काम के हुदै छ ?  
दुधपोखरी गाउपालिका मा अहिले सम्म किन आइपुगेको छैन ?

13:43:45 From Hempal Shrestha : @Abhimanyu sir , All we will be sharing all the presnetation via google docs reprot live Google docs: <https://bit.ly/3gioKPB>

13:45:20 From simkot RM ITO : connection vahey ra hudaina quality dinu pareyo ni sir NTA le

13:47:52 From Kanchanrup Mun Saptary : ito.kanchanrupmun@gmail.com 9841518163

13:49:08 From प्रज्वल देवकोटा : NTA ले प्रदान गर्ने भनेको सूचना केन्द्र स्थापनाको कार्य कहिले बाट आरम्भ हुने होला सर जानकारी पाए आभार हुने थिए

13:51:14 From Barbardiya Mun, Radheshyam Pd chaudhary : NTA ले विभिन्न पालिकाहरुमा सुचना प्रविधि केन्द्र स्थापना गर्ने भनेको थियो, त्यो कार्य कहासम्म पुग्यो? जानकारी पाए हुन्थ्यो- हाडा सर

13:53:03 From Abhimanyu Pandey : Q3. I hope NTA can develop a TCO - total cost of ownership model - comparison with of rural and urban connectivity. This will inform true fiscal requirements, which anecdotally should be higher for rural areas

13:55:15 From Sahadev Chaudhary : ग्रामिण दूरसञ्चारको रकम त सरकारी मन्त्री र नेताको गाडिमा खर्च गर्न मन्त्रालयले दबाब दिने गरेको सुनिन्छ। RDTF को पैसा चलाउन मिल्छ की मिल्दैन ?  
NTA मा ग्रामीण दूरसञ्चारको रकम दुरुपयोग भएको हो ?

14:04:28 From Hempal Shrestha To C P Gharti Magar(Privately) : Sir, I will be coming for your inputs nowafter Dr. Hada sir presntation is that okay

14:06:25 From C P Gharti Magar To Hempal Shrestha(Privately) : ok,sir.

14:07:24 From Bharat Bastola : namaste sabaijanalai I am from marsyangdi rural mun

14:08:02 From Simkot RM Humla : कथा त् राम्रोसँगसुनोउ ....? तर नेपाल telecom काम कस्तो छ हामी सबै लाई थाहा छदैछ नि ...!!

14:13:38 From Govinda Rokaya, PLGSP,Sudurpashchim : स्थानीय तथा प्रदेश सरकार बाट हुने कार्य लाइ digitally गरी सेवा प्रबाह लाइ प्रभावकारी बनाउने कार्य योजना लाइ सुरुवात गर्न सकिएला ??

- 14:13:56 From प्रज्वल देवकोटा : cp मगर सरको समस्या प्रतिनिधि समस्या हो स्थानीय तह बनेको ३ बष बिती सकदा नि पालिका केन्द्रमा न त मोबाईल नेटवोर्क सिग्नल छ नेट त् परको कुरा
- 14:14:02 From Trilochan Lasmal : C P Gharti ज्युको कुरा सहि छ, यो ब्रोड ब्रान्ड को नाम मात्रै हो काम होला जस्तो छैन
- 14:14:13 From bhumemun Janak oli : s
- 14:14:20 From Abhimanyu Pandey : Q4. The issue with wireless is earthing. If that is not done, all wireless efforts are wasted. Another experience sharing: The storms in karnali are strong enough to shake houses (brick and mortar)
- 14:14:23 From T.R Thakur-Buddhashanti RM : म तोषराज ठाकुर - बुद्धशान्ति गाउँपालिका(सूचना प्रबिधि अधिकृत ). झापाको स्थानीय तहमा अप्टिकल फाइबर जडान गरि निसुल्क इन्टरनेट दिने सम्झौता बारे पनि सुन्न मा आको छ ... कुरो के हो ? नेपाल टेलिकम ले त्यस्तो कुनै सम्झौता गरे नगरेको जानकारी दिनु होला ... धन्यबाद
- 14:14:38 From Birendra Parajuli PLGSP PPIU Pokhara : नेपाल दुर सञ्चार प्राधिकरणको काममा प्रभावकारिता देखिएको छैन । सुधार गर्नुपर्यो । केवल ठेकेदारहरूको पक्षमा मात्र काम भएको तर दुर दराजमा सेवामा प्रभावकारिता देखिएको छैन ।
- 14:14:41 From Ram Kishor Rawal : Cp Ghatir sir le bhaneko kura karnali pardesh ko barema 100% sahi Bhanu bhayo ..... Thank you sir
- 14:17:47 From Suresh : @kanchanpur laljhad rural municipality ma telicom ko dedicated lease line 5mbps jodeko xu bt speed herda aajkal 1 mbps ni chain....ke bha hola telicom ma phone grda uthdain
- 14:18:07 From प्रज्वल देवकोटा : 13% TSC पालिकाले सेवा प्रदायक लाई प्रदान गर्नु पर्ने हो जानकारी भएका साथीले भनि दिनु पर्यो??
- 14:18:47 From Hempal Shrestha To Chehen Lama(Privately) : @Chehan sir, I will be requesting ro your inputs now after Ramesh sir
- 14:18:54 From Hempal Shrestha To Chehen Lama(Privately) : with a leading questions.
- 14:18:58 From Chehen Lama To Hempal Shrestha(Privately) : sure
- 14:22:18 From Pavan Singh Shakya : Its different Everest Link not the one Chehen Sir is operating
- 14:23:01 From Hempal Shrestha : @Pavan sir, thanks for the clarification
- 14:23:10 From Abhimanyu Pandey : @Chehen GREAT POINT
- 14:23:11 From Niraj Bhandari-STN : Solution to this issue is Bluetown
- 14:23:15 From Niraj Bhandari-STN : +91 97171 37477 Keshav Sharma Bluetown

<https://www.youtube.com/watch?v=1HJ8mNloJhc>

<https://bluetown.com/>

For Nepal Hridaya Kadel +9779840051763

14:23:19 From Sujan shrestha : Some of the Innovative Technologies to combat present challenges for Digital Rural Broadband.

1. Light wind power system, renewable energy system that can provide power source even in night and snowfall time( in absence of solar energy)
2. Install microwave link by setting up Passive Repeater System at high altitude (where no active equipment like power system, radio equipment required, no fear of lightning)
3. Implement lower cost, lower latency LEO/MEO Satellite system with satellite hub system set up at less rain precipitation zone like Jomsom, Mustang

NTA should also utilize RTDF fund in such innovative technologies to increase rural broadband penetration and realize sustainable rural broadband.

14:23:50 From Rupesh Shrestha : Rural municipality मा Telecom, Internet सेवा लिंदा पनि 2% RTDF किन तिर्ने?

14:24:00 From Dr. Surendra Hada To Hempal Shrestha(Privately) : we are working in Manang and Mustang

14:24:29 From Barbardiya Mun, Radheshyam Pd chaudhary : @kanchanpur laljhad rural mun, ho ahile dedicated lease line ko speed adsl bhanda ramro xina. speed ke bhaeko ho NTA le Pushti garnu parxa.

14:25:04 From Govinda Rokaya, PLGSP,Sudurpashchim : The issue is not only to increase the access to internet to the local governments, the issues are largely with the attitude of proper usage and using the internet to link the services with the digital domains and reliability of the internet services in the rural areas is questionable. If there are disturbances in the internet and connectivity, people from the rural areas have to create pressure to the political parties or the NTA for repair and maintenance. NTA should have schedules for monitoring and operation and maintenance.

14:25:43 From Pavan Singh Shakya : Further to innovative technologies -- we also have L.110 direct burial fiber cable which can be laid on land, in water and even in snow.

14:26:18 From Hempal Shrestha To Sewa Pathak(Privately) : @Sewa madam, I will come to you for your inputs now

14:26:37 From Hempal Shrestha To Sewa Pathak(Privately) : is that fine

14:26:47 From Sewa Pathak To Hempal Shrestha(Privately) : sure

14:28:20 From Urja Chawal : 1) gov.np websites on NTC sim is free in mobile. won't it be possible for other Telecom

2) youtube is free for worldlink, won't it be possible for other internet distributors

3) since due to lock down, education website developed by Gov need to make free

14:28:41 From Urja Chawal : NTA should lead on above things

14:29:45 From Abhimanyu Pandey : what is more important cost? quality? time to service? (you only get to pick two)

14:30:38 From Aalital Rm : Surendra sir now we have connected wireless dedicated lease line of 2 mbps which is very slow , so can ntc provide fiber line . if yes what is the process

14:31:10 From Hempal Shrestha : thank you for initiating good feedback and suggestion here int he chat as well, would request to share your inputs here as well

14:32:05 From Binod chandra Shrestha : NTA is monitoring through NOC of operators as well as NTA's consultants and Employees are monitoring physically. Now due to COVID-19. We are also getting complaints from the subscribers and instructing to operators to resolve the problems.

14:33:24 From Binod chandra Shrestha : @Urja Chawal We will check with our operators.

14:33:38 From Abhimanyu Pandey : @Binod Sir: has SDN become part of Nepal's ISP ecosystem

14:34:11 From Abhimanyu Pandey : @Chehen Great Point - one time intervention is tough

14:34:22 From Abhimanyu Pandey : and not sustainable

14:34:46 From प्रज्वल देवकोटा : ईन्टरनेट एक पटक पुयाउने ठुलो कुरा जस्तो लाग्दैन reliable हुनु ठुलो कुरा हो जस्तो लाग्छ

14:36:40 From Binod chandra Shrestha : @ Govinda Rokaya NTA is regularly monitoring regulating the services. The operators shall maintain QoS benchmark set by NTA.

14:37:08 From प्रज्वल देवकोटा : Vianet are u providing a quality internet with in valley, are the costumer satisfied if not why u are planning to increase coverage outside in rural area..

14:38:59 From Abhimanyu Pandey : Internet is a human right. I think this matches @Chehen sir's statement

14:39:27 From Birendra Parajuli PLGSP PPIU Pokhara : Great Sewa jee ! Lipulake must be focused by social-infrastructural services side by side security.

14:39:30 From Binod chandra Shrestha : @Rupesh Shrestha RTDF is for fund collected for development of telecommunication in Rural Area. So as per current provision operators shall deposit 2% of their annual revenue.

14:41:12 From Binod chandra Shrestha : @From Sujan shrestha we can talk about it.

14:42:15 From प्रज्वल देवकोटा : यदी कुनै दिन NTA ले QOS को कुराले ISP हरुलाई कारबाही गर्ने नीति लियो भने हाम्रा आहिलेका ISP कहाँ जान्छन होला??

14:42:50 From Abhimanyu Pandey : Should we waive all taxes for 10 years in rural areas?

14:43:17 From Sujan shrestha : Internet is like oxygen, you will feel its importance only when you get it less and not all.

14:43:52 From Abhimanyu Pandey : GDP increase will compensate for loss of tax collection ...

14:45:49 From Naveen Chauhan : hii

14:48:40 From Binod chandra Shrestha : @ doodhpokhari Municipality World Link is working for Lamjung through our RTDF funded project. We will inform the operator too.

- 14:52:31 From धिरेन्द्र चन्द सोडारी :  
<https://ictsamachar.com/news-details/2742/2020-06-18>
- 14:53:20 From bhumemun Janak oli : रूकुम पूर्व तिन वटा गाउँपालिका मा हामीले रिले गरेर ADSI Wlink Everest जोडी सक्यो तर कसैको पनि net reliable छैन दिन मा कम्मतिमा पनि ४ चोटी फोन गर्नु पर्छ रोल्पाको रातामाटा र सल्यानमा सर्भर डाउन भै राख्छ काम गर्न गाह्रो भै रहेको छ न फोनले काम गर्छ यस्तो पाराले कसरी डिजिटल नेपाल बनाउने हो पालिकामा यस्तो छ वडामा के हालत होला आज पनी नेट आउने जाने भैराछ Net stable नै छैन
- 14:53:42 From Binod chandra Shrestha : @ प्रज्वल देवकोटा Yes you are right.
- 14:54:18 From Chehen Lama To Hempal Shrestha(Privately) : Pheri pani spastikaran Everestlink ko tarfa bata. Everestlink ra Everestnet farak ho
- 14:54:30 From Hempal Shrestha To Chehen Lama(Privately) : :)
- 14:55:07 From Bhim Dhoj Shrestha : Internet has become life line now. Very happy that many municipalities and rural mu-nicipalities are participating here. Earlier, we from IT Community is requesting govt to support for internet [push mechanism], now as municipalities has ambition to provide smart palika/city along with connectivity, have to request with central govt and work with Telecoms and ISPs [Pull mechanism]. Unless and until rural connectivity flour-ish, Govt's Digital Nepal program will not be a success.
- 14:55:14 From Binod chandra Shrestha : @ bhumemun Janak oli World Link is responsible for your area. We will talk with Wlink.
- 14:55:55 From Gopal Oli ITO Musikot MUn : मुसिकोट नगरपालिका रूकुम (पश्चिम) मा WorldLink ISP को Service stable as well as quality पनि छ, २ बर्षको करार सम्झौता सकिए पछी, हालको Bandwidth मा शुल्क कति लाग्ने होला ??
- 14:57:05 From Abhimanyu Pandey : if we get entwined in push and pull pedagogy, then smart phones would have not have designed ... Steve Jobs made iPhone despite many telling him that hardly anyone would buy and carry such heavy personal devices ... the issue is do we recognize internet/digital services as a human right?
- 14:57:22 From Binod chandra Shrestha : @Gopal Oli ITO They will provide at NTA approved tariff.
- 14:57:57 From Rupani R\_Mun : subisu ले समयमा कार्य गरि दिदैन सर
- 14:58:45 From Gopal Oli ITO Musikot MUn : Thank you sir, I have planned to connect with intranet over our LG using WorldLink Network, How much cost for this???
- 14:59:30 From Tek Guragain : यहाँ NTC को 4G घर बाहिर मात्र चल्छ । घर भित्र पसेपछी H R E मा झर्छ ।
- 14:59:48 From Tek Guragain : मिक्लाजुङ गाँउपालिका ।



15:00:14 From Binod chandra Shrestha : @Rupani R\_Mun Do you not have service of Subisu now?

15:01:16 From Laxmi Kandel : hello everyone I've to say something

15:01:23 From Tek Guragain : ani QOS ko based ma ISP harulai complain garne service pani hunuparyo

15:01:50 From Niraj Bhandari-STN : Jun ISP aayena ni wuhi ho

15:03:39 From Abhimanyu Pandey : I don't think the debate is fiber vs wireless, rather the quality and type of service while ensuring future proofing the technology

15:03:49 From Ram Krishna Pariyar To Hempal Shrestha(Privately) : if we have time, I will briefly explain some of the mile stone and service provided @ P2

15:03:58 From Gopal Oli ITO Musikot MUn : WorldLink all को devices अनि इन्टरनेट सेवामामा qualities पनि छ,

15:06:48 From Simkot RM Humla : हुम्ला जिल्ला मा कुनै ISP स्थायी छैन

15:10:18 From Laxmi Kandel To Hempal Shrestha(Privately) : Hempal sir namaste! malai pani kei kura rakhnu cha hai

15:10:29 From Hempal Shrestha To Bhoj Bhatta(Privately) : Sir Can I ask for your input now

15:11:13 From Hempal Shrestha To Dilli Adhikari(Privately) : Sir Will request for your input in a , is that okay

15:14:22 From Pavan Singh Shakya : Long time back, Nepal Government has allocated 30 MHz channel in 3.5GHz...I think with proper planning and subsidy from Government, ISPs can provide effective and affordable services in rural areas

15:15:45 From Binay Bohra : 3.5GHz is now a goldmine because of its adoption for 5g.

15:17:12 From Pavan Singh Shakya : @Binay Bohra sir -- it is already allocated by Frequency Management Committee so NTA and ISPAN can take lead. Just my submission

15:17:32 From Pavan Singh Shakya : If I am not aware of the latest development :)

15:17:56 From Chehen Lama To Hempal Shrestha(Privately) : Nta does allocate frequency for PTP link and we have been using it

15:18:20 From Chehen Lama To Hempal Shrestha(Privately) : But the cost is really not justified

15:18:48 From Hempal Shrestha To Chehen Lama(Privately) : Sir your message came to me in private, may be you want to share it with everyone

15:19:28 From Chehen Lama : Nta does allocate frequency for PTP link and we have been using itBut the cost is really not justified

15:21:25 From Pavan Singh Shakya : ABCDE -- good approach Sir

15:21:47 From Sudip Gautam : Agreed with Chehen Sir

15:22:05 From Abhimanyu Pandey : If NEA leases out fiber - is it NSP?

15:22:09 From Hempal Shrestha : Please do raise your hand as well as it will ease admin to open your microphone as well

15:22:39 From Bhoj Bhatta To Hempal Shrestha(Privately) : hempal sir, I have to leave meeting. in next 5 min.

15:23:34 From Hempal Shrestha To Bhoj Bhatta(Privately) : sure thanks sir for your inputs, we will share report with you soon

15:24:08 From Bhoj Bhatta To Hempal Shrestha(Privately) : ok sir. thanks

15:24:09 From Hempal Shrestha To Bhoj Bhatta(Privately) : If you have anything to convey please do so

15:24:20 From Bhoj Bhatta To Hempal Shrestha(Privately) : no sir

15:24:35 From Hempal Shrestha To Bhoj Bhatta(Privately) : Thank you sir,

15:26:50 From Laxmi Kandel To Hempal Shrestha(Privately) : hello sir

15:27:07 From Laxmi Kandel To Hempal Shrestha(Privately) : mero pani cha

15:27:20 From Abhimanyu Pandey To Hempal Shrestha(Privately) : Laxmi kandel hand raised

15:29:44 From Abhimanyu Pandey : maybe the highest and lowest bidder should be excluded from final list? will it work?

15:33:30 From Abhimanyu Pandey : it is like the bus driver asking for extra fuel used by each passenger out of the way ...

15:36:11 From Sudip Gautam : No doubt Ram Krishna Sir

15:39:49 From Dixon Chaudhary : Government should really decrease the tax to the ISPs so that they can eventually decrease the price of the Internet to the consumers.

15:39:52 From Laxmi Kandel : I'm asking for any guideline or karyebishi to regulate or monitor ISPs by local gov.

15:45:31 From Pavan Singh Shakya : @Laxmi Kandelji -- NTA is the regulator and regulates price structure. I think as the Local Authority, Palika has every right to question

15:47:17 From Laxmi Kandel : @Pavan sir, NTA should provide those regulator mechanism to every LGs

15:48:00 From Laxmi Kandel : otherwise end user will always get victim by ISPs price and services

15:48:02 From Abhimanyu Pandey : NTA should ask ISP to have ombudsperson to report

15:50:28 From Abhimanyu Pandey : 1. Each ISP should use SDN 2. NTA should have read-only access to all ISP devices 3. Live/Real Time monitoring of devices 4. Realistic tender ... just lowest bidder will not work 5. Real rural implementation is much higher than urban, let us be realistic

15:50:37 From प्रज्वल देवकोटा : @laxmi kandel miss I strongly agree with u.

15:50:50 From Rupani R\_Mun To Hempal Shrestha(Privately) : सर subishu को नम्बर पाउँन

15:51:08 From Rupani R\_Mun To Hempal Shrestha(Privately) : यहाँ भन्दा पनि कार्य गर्न चाँहदैन खे

15:51:12 From Rupani R\_Mun To Hempal Shrestha(Privately) : किन हो किन

15:51:39 From Rupani R\_Mun To Hempal Shrestha(Privately) : राजविराजको subishu office मा कर्मचारी साईत कम छ कि

15:52:23 From Rupani R\_Mun To Hempal Shrestha(Privately) : सुविसुको MD सरको नम्बर पाउँन

15:53:05 From Sudip Gautam : @Rupani R\_Mun, We have past our toll free no. on ONU that we have installed at your premises. If you have any internet issues or query you can call in that number as we are available for 24 hours

15:54:49 From Sudip Gautam : # paste

15:58:16 From Sudip Gautam : Subisu's toll free no. is 16600159999 and this no. is dedicated to our NTA clients only

15:59:18 From Assa : May I also raise my hand, Hem sir?

15:59:35 From Assa : This is Assa Gurun

16:00:13 From Hempal Shrestha To Purushottam's iPhone(Privately) : Sir, I will request for your remarks at the end of the Resourc ePerson, is it okay with you

16:04:41 From Dinesh MC Jhimruk RM : sir Fulll record dmcctri@gmail.com ma mail garnu hola due to network i can not attend

16:06:51 From Dinesh MC Jhimruk RM : sir Local Level Ma Fiber Provide garnako lagi goverment/ Province or any other responsible hunx?

16:07:18 From Dinesh MC Jhimruk RM : and how this process on going

16:09:21 From Ganesh Shah To Hempal Shrestha(Privately) : I am

16:10:46 From Abhimanyu Pandey : PPP is not just about local money investment, but it is more about providing security, training, and sweat equity

16:10:58 From Abhimanyu Pandey : through local resources

16:13:56 From Hempal Shrestha To Purushottam's iPhone(Privately) : Sir I will come to you (Purushottam sir )after Razan ji for your concluding remarks and Ganesh sir will share his Vote of Thanks to all the Resourec ePerson and participatns, i hope it is fine with you

16:14:18 From Hempal Shrestha To Ganesh Shah(Privately) : Sir I will come to Purushottam sir after Razan ji for your concluding remarks and Ganesh sir will share his Vote of Thanks to all the Resourec ePerson and participatns, i hope it is fine with you

16:18:05 From Assa : Hem Sir, I wrote again

16:18:26 From Assa : I have few things

16:18:50 From Hempal Shrestha To Assa(Privately) : Assa ji, we missed your inputs as we already movead ahed toward concluding session,

16:19:19 From Hempal Shrestha To Assa(Privately) : cany you plplease share your inputs in teh chat I will raise it as I can understand from my seid

16:19:21 From Hempal Shrestha To Assa(Privately) : side

16:22:20 From Assa To Hempal Shrestha(Privately) : 1. I have been asked whether we can run an international course online in Nepal?

16:22:47 From Hempal Shrestha To Assa(Privately) : hmmm..

16:23:26 From Hempal Shrestha To Assa(Privately) : its not an issue of technolgy but certificateion matter for the Education ministry I guess,

16:23:48 From Hempal Shrestha To Manohar K Bhattarai(Privately) : Manohars sir woudl you like to share anything in brief before Ganesh sir share his vote of thanks, and after Prurusotma sir,Concluding Remarks

16:24:19 From Assa To Hempal Shrestha(Privately) : 2. I heard in an interview with Binod Chaudhary that he is going to provide the service at half cost. But he is not being why

16:25:46 From milan To Hempal Shrestha(Privately) : hempal sir pache ko digital sambad ko lagi...topic suggest garna mil6

16:29:25 From Hempal Shrestha : @Milan sir, Everyone you can also suggest us topics and resourece person for future Digital Samvad Sessions aswell

16:31:36 From Pavan Singh Shakya : @Hempal Sir-- I think digital health as one of the verticals of Digital Nepal Framework will be more appropriate

16:32:20 From Pavan Singh Shakya : this is more relevant when more authorities are looking into tele-xx services

16:32:24 From Dinesh MC Jhimruk RM : स्थानीय सरकारले फाइवरमा लगानी गरी रोजगार सिर्जना गर्ने अनि स्थानीयबाट कर उठाउन सक्ने अवस्था हुन सक्छ किनाइ ?

16:32:33 From milan To Hempal Shrestha(Privately) : nepal ko +2 paxi ko IT and engineering education...tesle market sanga milne quality resource niklane sakeko 6 ki 6aina...course kati ko updated 6...industry ra academic ko kati ko linkage 6....research ma college haru kaati ko focused 6.....global ranking ma hamro university kata 6...hamro professor haru ko level kati 6 international level ma...entrepreneurship jasto kuro ma student haru lai motivate garne environment 6 ki 6aina

16:33:28 From Hempal Shrestha To milan(Privately) : @Pavan sir, All we will need good resourcer persons for good Samvad, please do suggest us good resource persons as well for Digital health and other topics,

16:34:32 From Hempal Shrestha : @Pavan sir, All we will need good resourcer persons for good Samvad, please do suggest us good resource persons as well for Digital health and other topics,

16:35:13 From Razan Lamsal : सबैलाई धन्यवाद सहित स्थानीय निकायका साथीहरु र अन्य सबैलाई आफ्नो इमेल Address यहाँ लेखिदिनु हुन अनुरोध गर्दछु, कार्यक्रम पश्चात रिपोर्ट, प्रिजेन्टेशन र भिडियो इमेलमा पठाउनेछौं

16:35:35 From Dixon Chaudhary : dixonchaudhary7@gmail.com

16:35:42 From Dr. Surendra Hada : Thank you all for interactive participation

16:35:49 From Dipak Khadka- Chhathar Jorpati RMUN : ito.chhatharjorpatirmun@gmail.com

16:36:00 From Abhimanyu Pandey : @Hempal Sir: we need to talk about content development relevant to Nepal (governance, health, education, agriculture, etc. all digital Nepal verticals) ... imho

16:36:41 From simkot RM ITO : info.simkotmun.gov.np

16:36:47 From Razan Lamsal : Our official email ID - samvaddigital@gmail.com

16:37:43 From Sudip Gautam : nakhui@gmail.com

16:38:04 From Alert Technology : Bikash Shrestha ceo@alerttechnology.com.np ; 9801108552

16:38:23 From Hempal Shrestha To Ganesh Shah(Privately) : Sir I will request for Vote of Thanks from you after Manohar sir

16:38:36 From Ganesh Shah To Hempal Shrestha(Privately) : ok

16:39:54 From Hempal Shrestha To Ganesh Shah(Privately) : thanks sir,

16:40:09 From Laxman Pokharel : lpokharel@gmail.com

16:40:44 From simkot RM ITO : ito.simkotmun@gmail.com

16:46:41 From Razan Lamsal : Thank you again for your active participation.

16:46:54 From Pavan Singh Shakya : Thank you All !!

16:46:57 From Bhim Dhoj Shrestha : Thank you all!

16:47:36 From Dipak Khadka- Chhathar Jorpati RMUN : Thank you all for your valuable lesson.

16:47:53 From Anuj Poudel : अत्यन्तै उत्कृष्ट कार्यक्रम ।

16:47:55 From Ram Krishna Pariyar : thank you

16:47:59 From Sudip Gautam : Thank you all and have a great evening !

16:48:36 From Bharat Shrestha : my camera is not working...

16:50:16 From Alert Technology : Thank you everyone ..

16:56:56 From Dr. Surendra Hada To Hempal Shrestha(Privately) : I will take leave hai Hempal ji

16:58:53 From Hempal Shrestha To Dr. Surendra Hada(Privately) : Thank You Dr. Surendara Hada Sir

17:01:18 From Pavan Singh Shakya : Hernal Sir -- why not one session in Open Source

17:02:34 From Chakraghatta Rural Municipality : info@chakraghattamun.gov.np

17:03:56 From Manish Dewan To Hernal Shrestha(Privately) : hernal sir, thank you for organizing this...very informative

17:06:09 From Dinesh MC Jhimruk RM : sir aajako record send ganu hola ni al

17:06:14 From Dinesh MC Jhimruk RM : sabai herna paina

17:14:18 From Razan Lamsal : ictaward.org

17:17:42 From Pavan Singh Shakya : jitsi.org

17:23:14 From Pavan Singh Shakya To Hernal Shrestha(Privately) : Sir, I need to go now. With you permission, may I take leave ?

17:24:15 From Hernal Shrestha To Pavan Singh Shakya(Privately) : Please sir, thank sforyou rtime and contributeion

17:26:48 From Laxman Pokharel : lpokharel@gmail.com

17:43:18 From Rupani R\_Mun ITO Manjay Yadav To Hernal Shrestha(Privately) : Hospital software को लागि कुन सर सँग सम्पर्क गर्दा हुन्छ

## **F. Samvad Sankshep:**

At the culmination of the samvad, Mr. Razan Lamsal, co-host of the Digital Samvad 2.0 presented the Samvad Sankshep on Digital Rural Connectivity. He compiled the thoughts and issues shared during the Samvad as presented below:

### 1. Purushottam Khanal

- Expansion of internet is a top priority in rural areas
- Work is being done under various projects through the Rural Telecommunication Fund and internet has been expanded in all the wards of 41 districts

### 2. Ganesh Shah

- Since the internet has become like a basic necessity, the internet should be cheap and reliable
- Although the government is preparing to make digital Nepal, much work will not be done until internet access is expanded, so emphasis should be laid on expanding access to digital connectivity in rural areas

### 3. Manohar Bhattarai

- With the advent of new technologies like AI, IoT, BigData, there is a need to focus on 'meaningful' broadband connectivity, with a view to increasing the digital divide

### 4. Dilli Adhikari

- Since Nepal Telecom has been working on projects under the Telecommunication Fund with priority lately, now it is necessary to emphasize on the productivity and usefulness of the Internet.

## Digital Rural Connectivity

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### SECTION - D: THE WAY AHEAD

#### Chapter VI Samvad Way Ahead

##### A. Samvad Niskarsa (English):

- Internet usage has skyrocketed since a few time and needs to be properly managed and utilized
- Internet service needs to be affordable and qualitative
- Government plans of qualitative internet is a must
- Expansion of internet is a top priority in rural areas
- With the advent of new technologies like AI, IoT, BigData, there is a need to focus on 'meaningful' broadband connectivity, keeping in mind the growing digital divide
- As Forge expands through various 3500 towers, it will make a leap forward in digital conversion
- 701 Even though the Internet has been expanded at the local level, there is still a lot of work to be done in the expansion of high speed meaningful internet
- Separate frequency band should be provided for internet expansion in rural areas
- Problems and lack of internet have not been able to fulfill the slogans of making smart municipality given in the budget at the local level

##### Samvad Niskarsa (Nepali):

- इन्टरनेटको प्रयोग केही समयदेखि नै बढेको छ र त्यसको उचित व्यवस्थापन र उपयोग गर्न आवश्यक छ
- इन्टरनेट सेवा सस्तो र गुणस्तरीय हुनुपर्छ
- गुणस्तरीय इन्टरनेटको सरकारी योजना आवश्यक छ
- ग्रामीण क्षेत्रमा इन्टरनेटको विस्तार मुख्य प्राथमिकतामा रहेको
- एआई, आइओटी, बिगडेटा जस्ता नयाँ प्रविधिहरू पनि आइरहेको हुँदा डिजिटल डिभाइड बढ्नेतर्फ सचेत हुँदै 'मिनिडफुल' ब्रोडब्याण्ड कनेक्टिभिटीमा जोड दिनुपर्ने
- विभिन्न ३५ सय टावरहरू मार्फत फोरजी विस्तार भइरहेको हुँदा यसले डिजिटल रूपान्तरणमा फड्को मार्ने
- ७०१ स्थानीय तहमा इन्टरनेट विस्तार भइसके पनि अझै उच्च गतिको मिनिडफुल इन्टरनेट विस्तारमा धेरै काम गर्नुपर्ने
- ग्रामीण क्षेत्रमा इन्टरनेट विस्तारको लागि छुट्टै फ्रिक्वेन्सी ब्याण्ड उपलब्ध गराउनुपर्ने



- इन्टरनेटको समस्या र अभावले स्थानीय स्तरमा बजेटमा दिइएको स्मार्टपालिका बनाउने नाराहरू पूरा गर्न नसकिएको
- इन्टरनेट विस्तार गर्न नसकिने स्थानमा इन्ट्रानेट र ओपन सोर्स प्लेटफर्महरूबाट पनि सेवा दिन सकिने