New Innovative Universal Service Fund Projects in Bhutan

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Introduction to ICT Landscape in Bhutan
Universal Service Programme in Bhutan
Objective of Universal Service Programme
Establishment and Utilization of Universal Service Fund
Methodology used for implementing US Programme
Status of US Programme
Impact of US Programme
Challenges
Way Forward
ICT LANDSCAPE IN BHUTAN

No. of Subscribers
-as of June 2018

- **Fixed Telephony**
  - Subscriber: 21,364
  - Teledensity: 2.7%

- **Mobile Telephone**
  - Subscriber: 709,431
  - Mobile density: 90.9%

- **Fixed Broadband**
  - Subscribers: 15,504
  - Penetration rate: 2.0%

- **Mobile Broadband**
  - Subscribers: 618,960
  - Penetration: 79.4%
Recognizing the cross-sectoral benefits of ICT for socio-economic development of the country, the Royal Government of Bhutan envisaged providing connectivity and accessibility to communications services to all its citizens, irrespective of where they dwell through the use of Universal Service Fund (USF)"

⇒ Under Universal Service Programme, four phases of rural communication programmes and two phases of ICTization of schools and health centers been implemented till date.
Through its Universal Service Programme, the Royal Government is trying to achieve the following objectives:

**Affordability**
- Same prices irrespective of where one dwells

**Availability**
- Services made available for all Bhutanese people

**Quality of Service**
- Maintain the same quality of services as in urban area

**Accessibility**
- Service are made accessible, irrespective of where one dwells

**Sustainability**
- Mandatory maintenance and operation of infrastructures
ESTABLISHMENT OF UNIVERSAL SERVICE FUND (USF)

Source
- Licence fees from liberalization of mobile sector was used as seed-fund

Utilization
- Developed Rules for administration and management of Fund.
- Only those programme which do not have dedicate fund are funded through USF.
- 4 rural communication programme and 2 ICTization project implemented.
- Over-all fund utilization is around 47%
Adopted “Minimum subsidy” method through open competition bidding

⇒ Project awarded to the telecom operator seeking lowest subsidy for providing connectivity to the designated un-connected village

Collaborative Approach with local government has been used to identify the areas to be included under US Programme

⇒ Local Government identifies the un-connected villages and share the information with the Authority.
⇒ The list is further validated with the service providers and then finalized the list of un-connected village.
⇒ Then sought bids for telecom operators (both total cost and subsidy requirements)
## STATUS OF UNIVERSAL SERVICE PROGRAMME

### Rural Communications Programme

<table>
<thead>
<tr>
<th>Phase</th>
<th>No. of villages connected</th>
<th>Contribution from Service Provider (Nu. Million)</th>
<th>Government Subsidy (Nu. Million)</th>
<th>Total cost of connectivity (Nu. Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCP-I</td>
<td>280</td>
<td>161.805</td>
<td>188.385</td>
<td>350.19</td>
</tr>
<tr>
<td>RCP-II</td>
<td>314</td>
<td>77.5848</td>
<td>177.99507</td>
<td>255.5799</td>
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<tr>
<td>RCP-III</td>
<td>73</td>
<td>47.48</td>
<td>95.36</td>
<td>142.84</td>
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<tr>
<td>RCP-IV</td>
<td>63</td>
<td>84.147</td>
<td>244.5985</td>
<td>328.7455</td>
</tr>
<tr>
<td>Total</td>
<td>730</td>
<td>363.148</td>
<td>706.3385</td>
<td>1077.3554</td>
</tr>
</tbody>
</table>

### ICTization Programme

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of schools connected with internet leased line</th>
<th>No. of Health centers connected with internet leased line</th>
<th>Total subsidy from USF (Nu. in millions)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>29</td>
<td>0</td>
<td>5.3217</td>
<td>Full subsidy from USF</td>
</tr>
<tr>
<td>2015</td>
<td>50</td>
<td>0</td>
<td>5.4025</td>
<td>Full subsidy from USF</td>
</tr>
<tr>
<td>2016</td>
<td>44</td>
<td>29</td>
<td>5.6122</td>
<td>Full subsidy from USF</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>29</td>
<td>16.3364</td>
<td></td>
</tr>
</tbody>
</table>
IMPACT OF US PROGRAMME

Changes in the communication landscape

• **Connected globally:** The villagers now have access to communication services at their door step.

• Communication in general are easier, quicker and cheaper.

Social Cohesion

• **Socially connected:** Villages are connected with family members and friends easily.

Rural empowerment and participation

• **Easy access to market:** Access to market information before transportation of their product.

• **Access to government service:** Access at any time and any where.

Micro coordination and improvement of Governance

• **Better coordination:** Local leaders use mobile to coordinate and relay important message to the community.
Geographical Placement

⇒ Rugged terrain, its geographical placement, lack of proper infrastructures and hostile weather conditions
⇒ High cost for providing connectivity to limited households in the rural areas.

Choice of Technology

⇒ RCP focused on voice communication and narrow-band internet services
⇒ Accessing internet in rural areas found slow and painstaking

Limited Bidders

⇒ Only two service providers competing for the subsidy
⇒ Not able to get competitive costing
⇒ Bidding cost found much higher than estimated costs
- **Up-gradation of technology**
  ⇒ Within next five years (2018-2023) in phase wise, plans to update the existing network (2/2.5/2/75 G) to 3G network

- **Highway connectivity**
  ⇒ Ensure a minimum of 90% of the national highways with good mobile connectivity and mobile connectivity does not stretch for more than 1 kilometer along the highway.

- **Inclusion of places of social and cultural sites**
  ⇒ Areas of cultural, social and spiritual sites will be connected with mobile services.

- **Setting up of standard costing estimate**
  ⇒ Establish a standard costing estimate to set baseline for comparison with the bids submitted by the service provider.
“KADRINCHE LA”

THANK YOU FOR YOUR ATTENTION