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དཔལ་ལྷན་འབྲུག་གཞུང་།

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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



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ICT LANDSCAPE IN BHUTAN

No. of Subscribers -as of June 2018

❖ Fixed Telephony

- Subscriber : 21,364
- Teledensity: 2.7 %

❖ Mobile Telephone

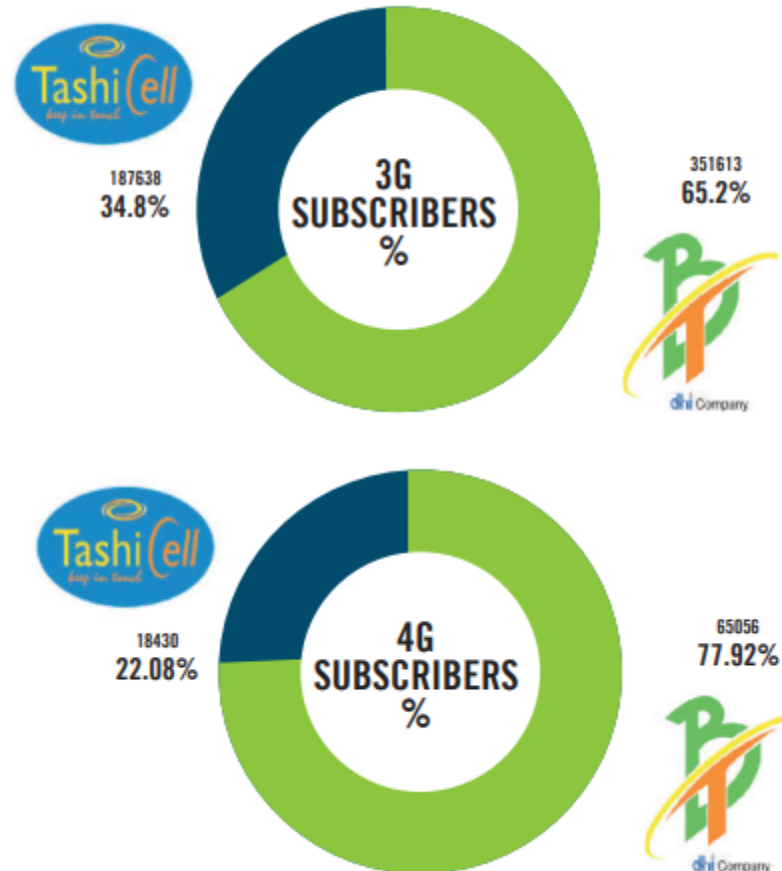
- Subscriber : 709,431
- Mobile density: 90.9%

❖ Fixed Broadband

- Subscribers : 15, 504
- Penetration rate: 2.0 %

❖ Mobile Broadband

- Subscribers: 618,960
- Penetration: 79.4%





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UNIVERSAL SERVICE PROGRAMME IN BHUTAN

“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.



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OBJECTIVES OF THE UNIVERSAL SERVICE PROGRAMME

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



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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%**

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METHODOLOGY USED FOR US PROGRAMME

- ❖ **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)



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STATUS OF UNIVERSAL SERVICE PROGRAMME

Rural Communications Programme

ICTization Programme

Phase	No. of villages connected	Contribution from Service Provider (Nu. Million)	Government Subsidy (Nu. Million)	Total cost of connectivity (Nu. Million)
RCP-I	280	161.805	188.385	350.19
RCP-II	314	77.5848	177.99507	255.5799
RCP-III	73	47.48	95.36	142.84
RCP-IV	63	84.147	244.5985	328.7455
Total	730	363.1418	706.3385	1077.3554

Year	No. of schools connected with internet leased line	No. of Health centers connected with internet leased line	Total subsidy from USF (Nu. in millions)	Remarks
2011	29	0	5.3217	Full subsidy from USF
2015	50	0	5.4025	
2016	44	29	5.6122	
TOTAL	123	29	16.3364	



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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

Micro coordination and improvement of Governance

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

Social Cohesion

- **Socially connected:** Villages are connected with family members and friend 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



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CHALLENGES

❖ 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



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❖ **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.



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“KADRINCHE LA”

**THANK YOU FOR YOUR
ATTENTION**

