

**PRESENTATION FOR THE WORLD TELECOMMUNICATIONS /ICT
INDICATORS (WTI) MEETING
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1. INTRODUCTION

Bhutan is situated in the eastern Himalayas, landlocked between China and India comprising a land area of 38, 394 square kilometers. The Himalayas of Bhutan consist of, from south to north, the Indian shield, the lower Himalayas, the higher Himalayan Crystallines, and the Tibetan series. Bhutan has one of the most rugged mountain terrains in the world, its elevations ranging from 160 meters to over 7000 meters above sea level.

The climate is humid and subtropical in the southern plains and foothills, temperate in the inner Himalayan valleys of the south and central regions, and cold in the north, with year-round snow on the main Himalayan summits. Annual precipitation ranges widely in various parts of the country. In the severe climate of the north, there is only about 40 millimeters of annual precipitation – primarily snow. In the temperate central regions, a yearly average of around 1,000 millimeters is more common, and 7,800 millimeters per year has been registered at some locations in the humid, subtropical south.

Bhutan is divided into 20 Dzongkhags or districts for administrative purpose and further sub divided into 201 Gewogs. A Geog is a block comprising a number of villages.

In the year 2003 the ministry of Information and Communications was created to emphasize the importance being given to the ICT sector by the Royal Government. This is an important milestone in the development of ICT in the country.

2. OVERVIEW OF COUNTRY

The main source of statistics on population is the population census.

COUNTRY PROFILE	
Capital	Thimphu
Area	38,394 sq km
No. Of Districts (Dzongkhags)	20
No. Of Blocks (Gewogs)	202
Population	734,340
No. Of House Holds	66,994
GDP	US\$ 646 Million (Nu. 29,086 Million)
GDP per Capita	US\$ 835
Currency	Ngultrum (Nu.)
Inflation Rate	1.6%

3. OVERVIEW OF TELECOM/ICT SECTOR

Ministry: Ministry of Information and Communications

Regulator: Bhutan Communications Authority

Operator: Bhutan Telecom, Druknet

2	TELECOM PROFILE	
	TELEPHONE NETWORK	
ID	ITEM	2004
i112	Main telephone lines in operation	29,598
i117	Total Capacity of Local public switching exchange	34,120
i1142	Percent of main lines connected to digital exchanges	100
i116	Percent of main lines which are residential	65
i1163	Number of localities (gewo gs) with telephone service	79
i1191	International telephone circuits	273
	Telephone Density (overall)	4.03%
	Urban Telephone Density	15%
	Rural Telephone Density	<1%
	MOBILE SERVICES	
ID	ITEM	2004
i271	Cellular mobile telephone subscribers	17,800
i2712	Digital cellular mobile subscribers	17,800
i271m	Number of mobile telephone internet subscribers	Nil

TEXT/DATA NETWORK		
ID	ITEM	2004
i311	Telex Subscriber lines	6
i4213	Internet subscribers	3,036
i4213d	Dial-up Internet subscribers	3,000
i4213cab	Cable modem Internet subscribers	Nil
i4213dsl	DSL Internet subscribers	Nil
i4213ob	Other broadband Internet subscribers	Nil
i4212	Internet users	10,000
i4212f	% Female Internet users	30%
i4212f%f	% Female Internet users as % of female population	Data not available
i4214	International Internet bandwidth (Mbps)	9.28
i4214og	International outgoing Internet bandwidth (Mbps)	3.64
i4214ic	International incoming Internet bandwidth (Mbps)	5.64
i28	Total number of ISDN subscribers	Nil
i281	Number of basic access ISDN subscribers	Nil
i282	Number of primary access ISDN subscribers	Nil
i28c	ISDN B Channel equivalents	Nil
TRAFFIC		
ID	ITEM	2004
i1311m	Local telephone traffic (minutes)	143,324,534
i1313wm	Fixed to mobile traffic (minutes)	Data not available
i1312m	National trunk telephone traffic (minutes)	34,210,284
i132m	International outgoing telephone traffic (minutes)	7,000,000
i132mi	International incoming telephone traffic (minutes)	23,480,543
Source- Bhutan Communications Authority (BCA) and Bhutan Telecom (BT) Corporation, Thimphu.		

4. DATA COLLECTOR

I. National Statistical Bureau (NSB)

Previously called the Central Statistical Office (CSO) under Ministry of Home Affairs has been recently changed to National Statistical Bureau (NSB). It is now functioning as an autonomous agency, which is responsible for collection, management and publication of data on Bhutan.

II. Bhutan Communications Authority (BCA)

Bhutan Communications Authority (BCA) under Ministry of Information and Communications deals with collection of data related

to telecommunications and Information and Communications Technology (ICT). It also feeds data on ICT to NSB for publication in the Statistical Year book.

The BCA provides information about Bhutan to International Telecommunications Union (ITU). The statistical information on population, GDP etc. is collected from NSB and then fed to ITU.

5. DATA COLLECTION METHODS

The methods used for collection of data are:

1. Survey

Survey is one of the methods used for collection of information on population, demography, health etc. It involves large number of surveyors and it is time consuming. The figure obtained entirely depends on the one who takes survey. It depends on their dedication and carefulness.

2. Paper Questionnaire

The BCA use this method to collect information on telecommunications and ICT. It is also being used by the NSB. The questionnaire is sent to the concerned organization for information on different fields and the concerned organization give information to the data collector. It is done on a periodical basis (each year etc.).

3. Interview - Interviewer-administered questionnaire

This method is not often used. It is usually used when the information required is urgent. Here the concerned person visits the concerned organization with the questionnaire and get the information by meeting the concerned personnel in that organization.

CHALLENGES:

- a. Data not available on time
- b. Labour intensive
- c. Heavy cost involved
- d. No standard method

6. DATA USERS

i. Inside Country

Inside the country the researchers and planners mainly use these data.

ii. Outside Country

The International Organizations (ITU, WHO, APT, UNDP etc.) and researchers outside mainly use the information.

7. CONCLUSION

The BCA follows the questionnaire developed by ITU for collection of data on ICT and it is hoped that we could learn from this meeting the appropriate methods for collection of data.

Thank you.