

# Telecentres in Nepal Lessons learned, prospects and challenges

**Manohar K Bhattarai**  
**ICT Consultant**  
**Manohar\_kb@wlink.com.np**

# Context

- Developmental challenges faced by the country – does widening digital divide makes challenges even more formidable?
- Can ICTs catalyze the development process
- Can ICTs meaningfully bridge the gaps in government service delivery?
- Information and knowledge combined is the fourth factor of production in a globalized context – does this notion hold true in case of rural communities
- Are telecentres best models to bridge digital divide? What about other forms of ICTs?

## Telecentres established through MoST/HLCIT/NITC

<b>District</b>	<b>VDC covered</b>	<b>Responsible agency</b>	<b>Type of connectivity</b>
<b>Parbat</b>	<b>Katuachaupari</b>	<b>ICT4D</b>	<b>Dial-up</b>
	<b>Manjphant</b>	<b>ICT4D</b>	<b>Dial-up</b>
	<b>Milanchowk</b>	<b>NITC/MoST</b>	<b>Dial-up</b>
<b>Sunsari</b>	<b>Singhiya</b>	<b>ICT4D</b>	<b>Wireless</b>
	<b>Dumraha</b>	<b>ICT4D</b>	<b>Wireless</b>
	<b>Madhesa</b>	<b>NITC/MoST</b>	<b>Wireless</b>
<b>Okhaldhunga</b>	<b>Okhaldhunga</b>	<b>ICT4D</b>	<b>VSAT</b>
	<b>Rumjhatar</b>	<b>ICT4D</b>	<b>VSAT/Wi-Fi</b>
<b>Mustang</b>	<b>Jomsom</b>	<b>ICT4D</b>	<b>VSAT</b>
	<b>Marpha</b>	<b>ICT4D</b>	<b>VSAT</b>
	<b>Tukuchey</b>	<b>NITC/MoST</b>	<b>VSAT</b>
<b>Kathmandu</b>	<b>Bungmati</b>	<b>ICT4D/ PPP arrangement</b>	<b>Dial-up</b>

## Telecentres established through SPPD-RUPP

<b>Municipality</b>	<b>Ward</b>
<b>Butwal</b>	<b>Ward # 15</b>
	<b>Khaireni RMC</b>
<b>Hetauda</b>	<b>Bhimphedi RMC</b>
	<b>Dulegaunda RMC</b>
<b>Nepalgunj</b>	<b>Ward # 1</b>
	<b>Kohalpur RMC</b>
<b>Biratnagar</b>	<b>Ward # 11</b>
	<b>Rangeli RMC</b>
<b>TribhuvanNagar</b>	<b>Lamahi RMC</b>

## Other rural ICT initiatives

- **Nepal Wireless ( Mahabir Pun)**
  - The success of this initiative has depended on the sustained personal dedication of a small group of individuals, over a period of seven years to date
  - The computers and Internet access are provided in secondary schools, and are mostly used by students and teachers
- **HealthNet**
- **COPPADES Nepal ICT project**

# Taking stock of telecentres in Nepal : Lessons learned and insights gained

- ICT4D/MoST-NITC/SPPD-RUPP

## Lessons learned...

- **e-Readiness**

- **Infrastructure a big bottleneck**

- Low telecom footprint
- Big disparity (betn rural and uban areas) .178 Vs 17

- **Dissuading net experience**

- Slow connectivity

- **Implementation modality**

- Mechanisms to ensure LG + community participation
  - Rationale, challenges prospects

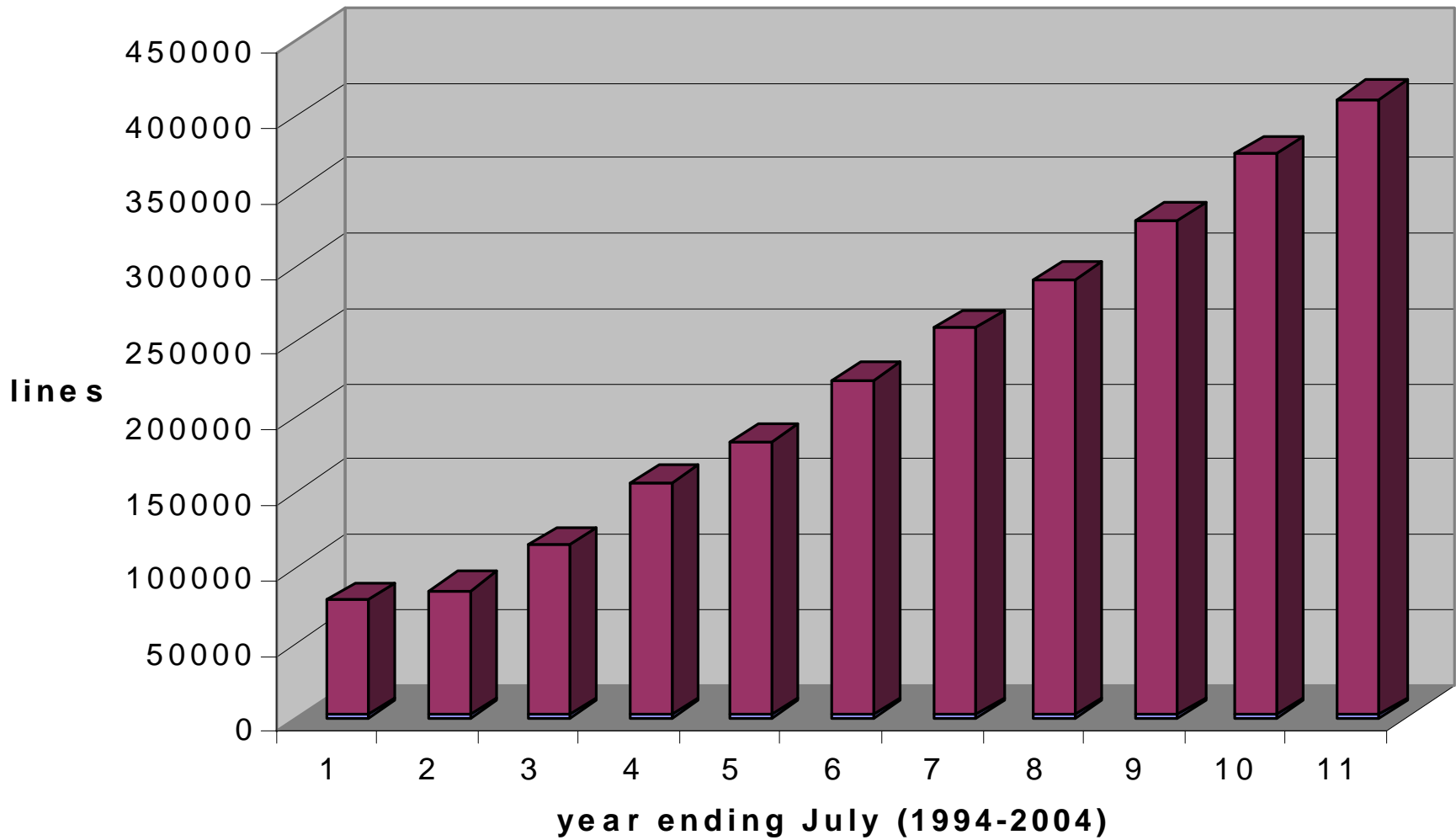
- **Security issues**

- **Sustainability issues**

- Level of value creation for communities
- Operation and management

# Telephone connection

number of exchange lines connected



## Telecentres in Nepal

### Key challenges

Poor information infrastructure (electricity and telecom) and higher costs of connectivity

Unavailability of locally relevant content and services/ lack of development focus and relevant strategies

Worsening security situation

Lack of competent manpower at the local level

Lack of local support structure providing technical backstopping support

### Resulting in

- Slow connectivity
- Dissuading net experience
- constricting bandwidth for IT enabled services(e-education, telemedicine, e-governance, etc
- Locally unaffordable tariff structure for access

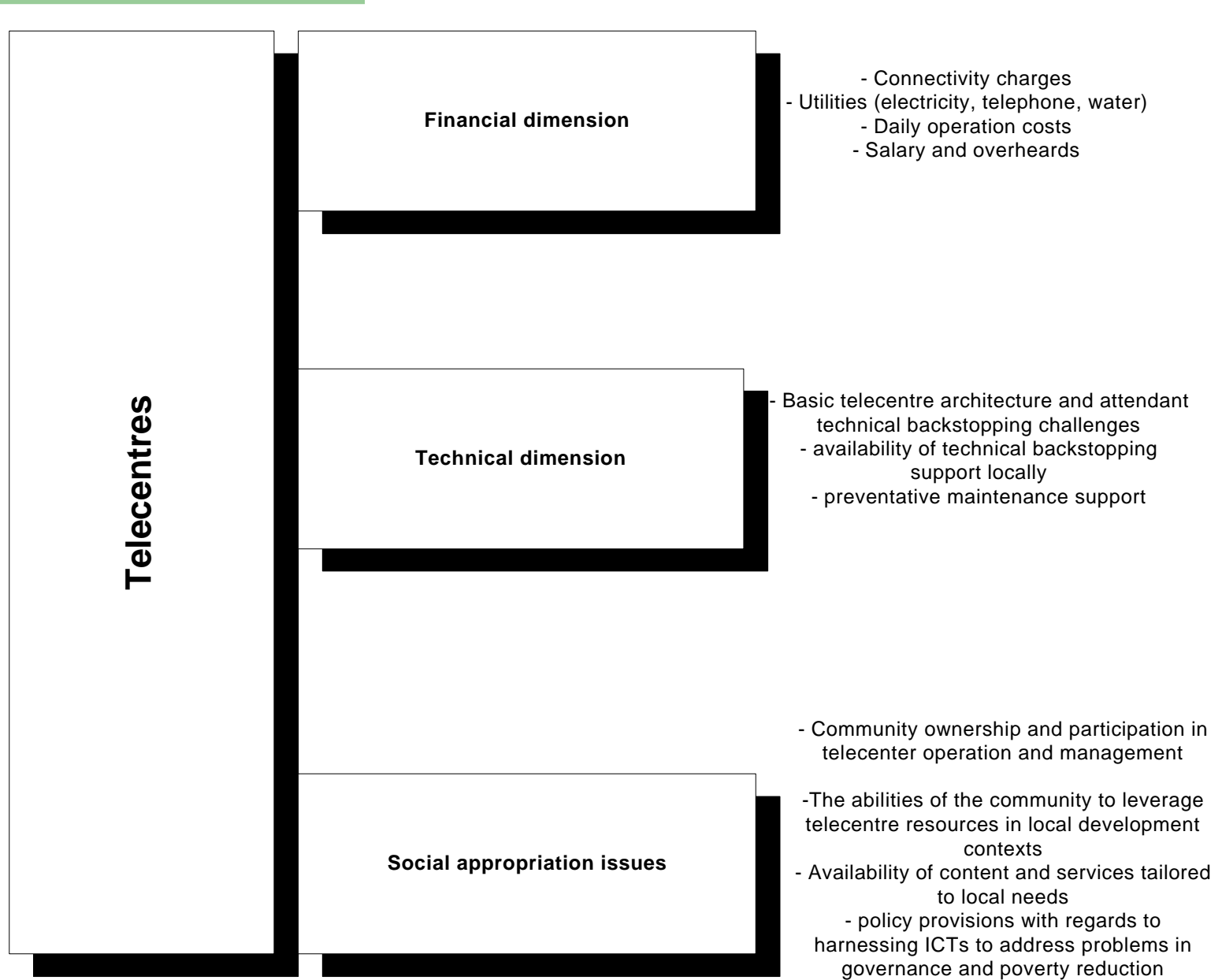
- Limited prospects of sustained value creation for communities and hence sustainability

Heightened threat perception (for communications infrastructure if not directly for telecentres) and as such affecting implementation and sustained operation

Inefficient day to day operation and lower prospects of sustainability at the local level

- Increased down-time, inefficient use of resources

**Fig 2 Dimensions of Telecentre sustainability**



# Major issue...

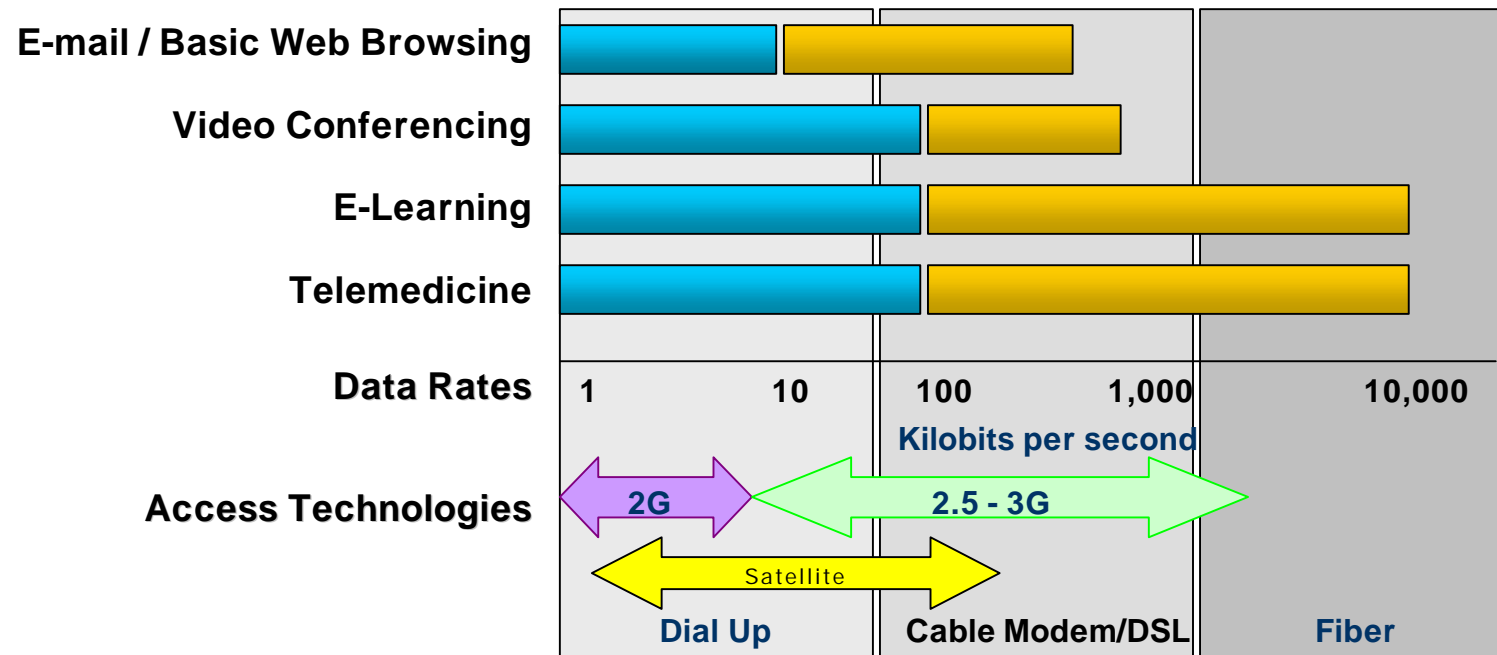
- What is the overall value proposition of telecentres and how can it be realized..
  - What material difference would access to a telecentre make in the life a community dweller?
    - Meeting basic communication needs
    - Adding value to productive economic activities through enhanced access to knowledge, information and services
    - ....

Focus should therefore be on the development and deployment of locally relevant content... and that is where challenge lies...

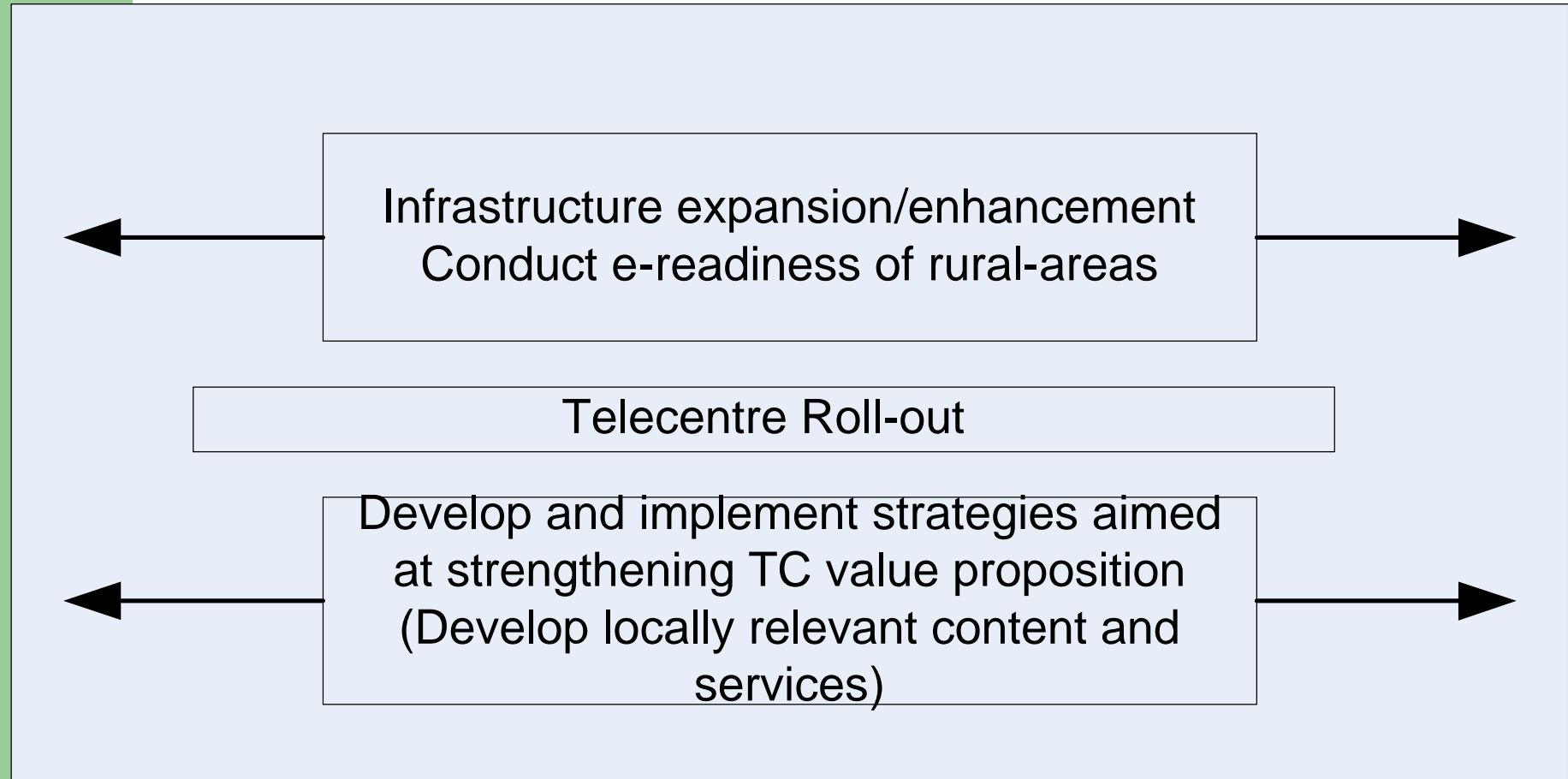
# Context for analyzing value proposition...

- Inadequate outreach of development services
  - Health
  - Education
  - Agricultural extension....all of which requires...institutional commitment and above all , enabling infrastructure....and that is where challenge lies...  
.....Beyond simple connectivity and potential to meet immediate information and communication needs, do we have infrastructure in place to meet strategic needs through ICTs??.....

# Speeds & Capabilities



## Strategic framework to be considered....



## **Building successful community telecentres takes time and needs continuing support.....**

Community appropriation of new technology is an organic process

- **Initial support: TCs** require handholding support for at least a period of 1.5 years.
- **Security:** overall security situation must improve in order to ensure success of any initiatives aimed at expanding rural connectivity.
- **Wireless connectivity:** over dependence on landline based dial-up connectivity for telecentre rollout excludes many potential areas
- **Cost of calls to Internet:** conducive policy provisions must be in place to bring down the connectivity charges to an affordable limit (for example, treating all calls made to ISP's by telecentres as local calls, tax breaks and like to rural ISPs).
- **Issues relating to contents and services:** creating digital opportunities

- **Off-line applications:** interactivity attributes of ICTs (for example internet and email) what gives ICTs their developmental potential but remains challenging from implementation perspectives
- **properly resourced co-ordination:** a central level institutional mechanism with clear mandate and mission to coordinate, facilitate and support telecentre related
- **continuing development:** mechanisms and advocacy thrust >> to encourage R&D on reducing barriers to ICTs >> easy interfaces, alternative sources of energy to power computer equipment and peripherals, local information and communication needs, solutions for harnessing digital means to capitalize on local opportunities and prospects
- **content production:** the rollout of telecentres should be accompanied by judiciously designed development and business models that create digital opportunities involving development and deployment of content, services and solutions that cater to local needs and requirements

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THANK YOU FOR YOUR ATTENTION