

How to make the unsustainable
sustainable?

Case of Telecommunications/ICT
services/Applications in Rural Nepal

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Economic Model for Telecommunications/ICT Applications /Services

- A rural network/services/Applications' **Total Cost of Ownership** is calculated by estimating both
 - the capital costs and
 - operating costsover a period of time.

Total Cost of Ownership (TCO) = Capital Costs + Operating Costs/Time

- The Total Cost of Ownership must be less than the total revenues
if it is to be financially feasible and sustainable for a period of time.
- If the Total Cost of Ownership is greater than the total revenues then
the network/services/applications may have to be
- **subsidized** with either initial or ongoing funding.

Total Cost of Ownership (TCO) < Revenues + Funding/Time

- The sustainability of a rural Telecommunications/Applications/Services is based upon **market forces** and the **potential need for funding**.
- The market forces are directly correlated to a rural area's **population density** and their **socio-economic status**.

There are three rural economic areas

- **Type 1: Areas that can be, or are, served by market forces**
- **Type 2: Areas that will need assistance with initial funding to become self-sustaining**
- **Type 3: Areas that cannot become self-sustaining and will require initial and ongoing funding.**

Type 1: Areas that can be, or are, served by market forces

- Capital Costs + Operating Costs \leq Total Revenues

Type 2: Areas that will need assistance with initial funding to become self-sustaining

- **Capital Costs + Operating Costs \leq Total Revenues + Initial Funding**

Type 3: Areas that cannot become self-sustaining and will require initial and ongoing funding.

Capital Costs + Operating Costs \leq Total
Revenues + Ongoing/Initial funding

- Each area has different telecommunications/ICTs requirements.
- The requirement for initial and ongoing funding will be dependent upon Total Cost of Ownership and market forces in each area.

Business Models

Government owned incumbent operator
mandated to provide
Telecommunications/ICT
services/Applications in the rural areas.

Private operators with capital subsidy
(Public Private Partnership)

Private Operators with **no subsidy** but
with **other incentives**
especially **applicable for Telecom**
services

Multi Stakeholder Partnership:

Thank you for your patience!!!