

# ICT FOR RURAL DEVELOPMENT

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# Profile of project area



- Population (2002-census)
  - Mara=1,369,000
    - Bunda=260,000
    - Serengeti=177,000
- Coast = 900,000
  - B'moyo=230,000

# Profile of project area cont..

- **People living below poverty line:**
  - **Bunda = 67.7%**
  - **Serengeti = 60.6%**
  - **Bagamoyo = 40%**
- **All sites have electricity from the power grid**
- **In Serengeti pilot, we work with Juasun as a local partner.**
- **Other partners include infrastructure owners, the regulator and relevant ministries.**
- **GPS co-ordinates:**
  - **Bunda - S 02 01.420 E 33 51.708**
  - **Serengeti - S 01 50.474 E 34 39.820**
  - **Wami - S6 27.604 E38 19.799**

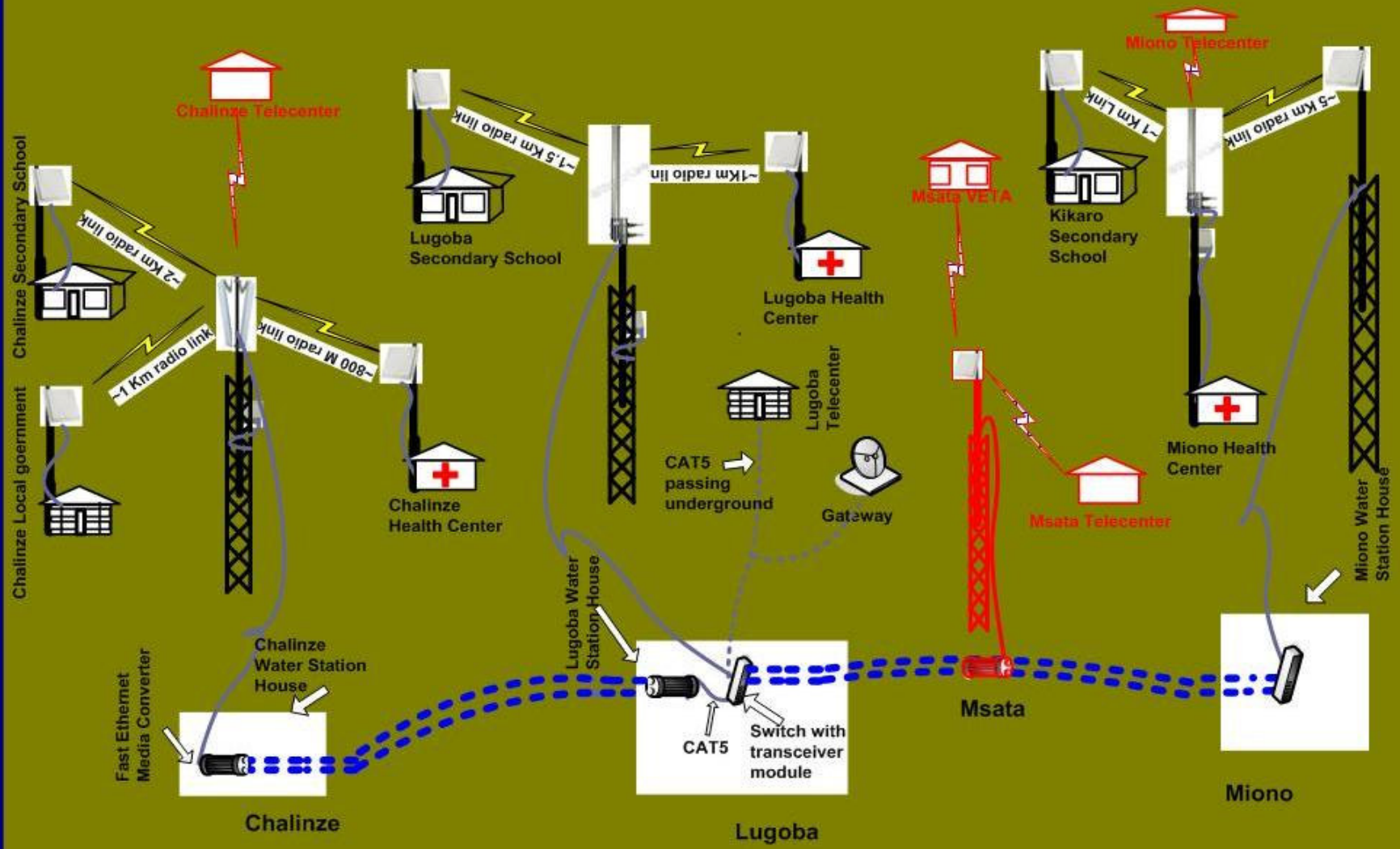
# Site selection

- **Site selection was based on the availability of existing infrastructure and the readiness to share.**
  - **There was a Community Telecenter in Lugoba, a ward within the Wami pilot.**
  - **Serengeti pilot connects two district capitals, hence potential users**
- **Other ICT infrastructure exists include Cellular networks, TV and radio.**
- **ICT Baseline studies were conducted in both areas**
- **Local governments are considered as owners of the network with Entrepreneurs and SMEs providing add-on services via PPP agreements**

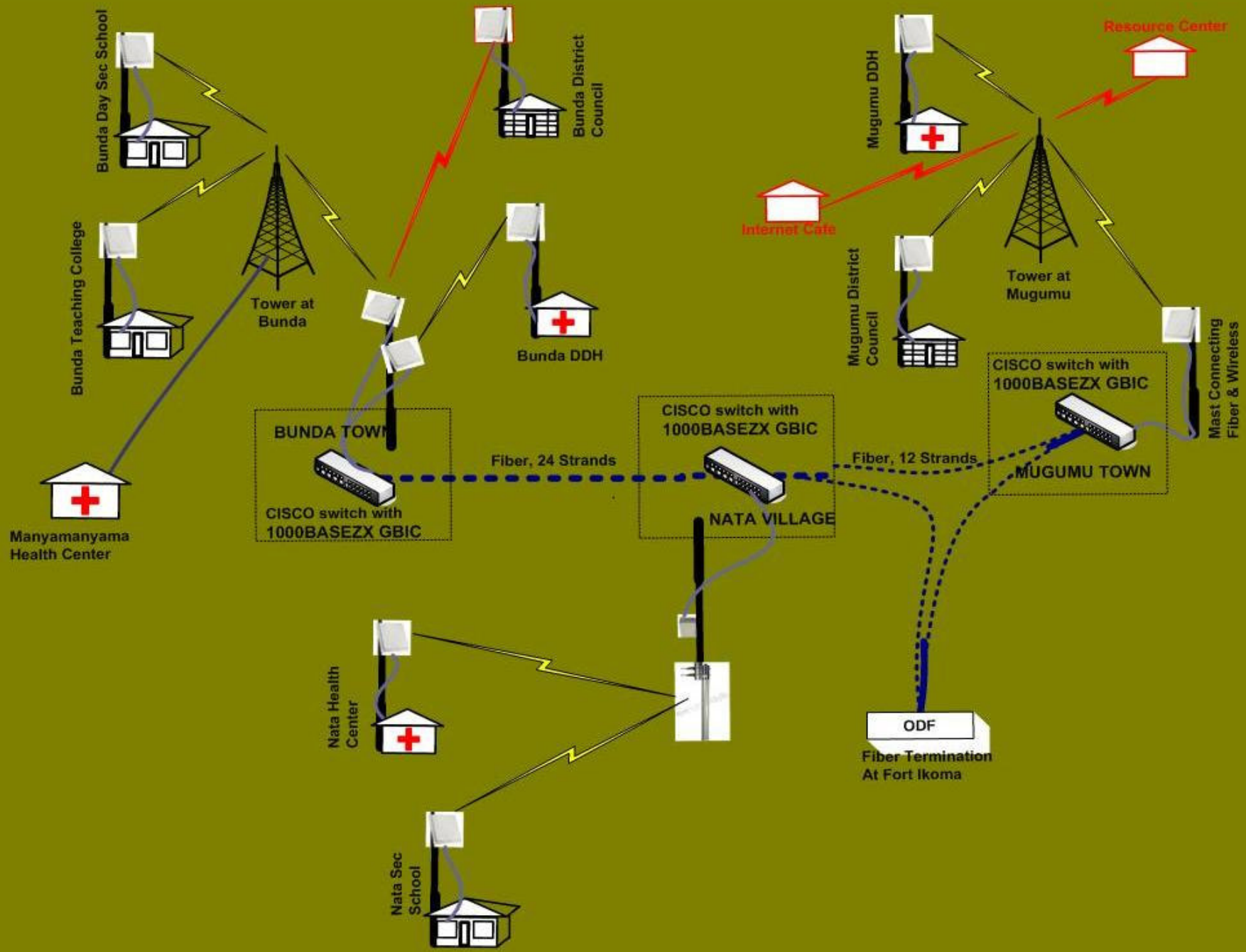
# **Description of project network**

- **ICT4RD is funded by SIDA 2006-2009**
- **We use VSAT as a backhaul with 128/64kbps. The backbone is a mixture of WiFi 2.4Ghz and an Optical Fiber. Access network are purely wireless.**
- **In Serengeti pilot, we use technicians from Juasun, a local ISP while vs DIT Staffs used in the Wami pilot. DIT is also training technicians in the Wireless and VSAT areas**
- **Tanzania Regulatory environment is a bit relaxed, VoIP and WiFi are legalised.**
- **Network diagram**

# ICT4RD Project, Wami Pilot



# ICT4RD Project, Serengeti Pilot



# Inauguration – June 2007





# Business models

- **Clients**
  - **Serengeti: 10 public institution's (schools, hospitals and district offices) and 5 private users.**
  - **Wami: 8 10 public institution's (schools, hospitals and local offices)**
- **running costs**
  - **Bandwith per site per month = \$513, Electricity = \$15, Watchman (Serengeti only) = \$60.**
- **Income**
  - **\$180, Expecting > \$1,000 by Oct 2008**
- **Do you recover costs?**
  - **Note yet, But we are sure of that.**

# Challenges & Lessons learned

- **Challenges**
  - Getting agreement with infrastructure owners
  - Lack of Strong Public-Private-Partnerships (PPP)
  - Availability and reliability of power supply
  - It is a Rural
    - Low purchasing power
    - Low density
    - Computer illiteracy
- **Lessons Learned**
  - There is a great demand
  - It can be done

# Way forward

- **More ICT awareness trainings to advocate the need and use of ICT in rural areas**
- **Involving the local and central government to increase their involvement, hence ownership**
- **Creation of local contents**
- **The pilots as models to be replicated by government or other communities**
- **Using the experience gained in this project, coming up with a strategic plan for low connectivity in the rural areas of Tanzania.**