Wireless Africa

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Profile of project area

- **LinkNet currently helps at four sites, Macha, CHAZ (Lusaka), Mukinge & Chilongolo (Lusaka).**

- **Macha**

- **Estimated 128,000 / 35 km radius**

- **Health and education**

- **Subsistence farmers**

- **Average income 500 U$D**

- **Connected to National grid, mostly stable, though can be unstable some days.**

- **Internet connectivity (via satellite link), GSM conectivity**

Site selection

- **ICT awareness public conferences**
- **GSM is also available in Macha.**
- **A needs assessment research was conducted in collaboration with TNO.**
- **The other local actors; Hospitals and Schools.**

Description of project network

- **Satellite link,point to point/mesh**
- **Wireless network diagram, (last slide)**
- **17 employees**
- **New sites – donor funded**
- **Client sustained**
- **Wireless is legal while VoIP not legal in Zambia**

Business models

- **Four Institutions**
- **Appr. 130 users**
- **No feedback yet**
- **CHAZ 10K USD, MIAM 6,3K USD, Users**
- **MMH, MGH, Users**

Challenges & Lessons learned

- Payments
- Funding setting up new sites
- Mesh Network Technologies
- Power
- Good network management
- Equipment supplies
- Know-how (Linux)

Way forward

- **I would refer you to our website. Please download our Master Plan. It has all the information you may need.**

LINKNET NETWORK TOPOLOGY @MACHA
17/8/06

MIAM LAB IT ROOM

LN002 (USA) NETWORK SERVER

WWW

Ku-Band via Africonnect

C-Band via ...

LN004 TESTER

LN001 NETWORK SERVER

LN003 NETWORK SERVER

ADAM (MIAM) FILE SERVER

EVE (MIAM) APPLICATION SERVER

LN005 ASTERIK SERVER

LN006 BACKUP SERVER

ARK

192.168.1.x   192.168.3.x   192.168.2.x

MIAM OFFICES   1.x

MIAM LAB   1.x

MIAM Lab Tower

2.x
3.x

1.x

Vision Community Center

MIAM LIBRARY

VANSTAM
Thuma
ZEBRA
CHEETAH
MHARAKURWA

MIAM Campus Tower

MIAM CAMPUS

2.x   2.x

1.x

Kalambo

Spurrier

Krause

Macha Water Tower

Macha Girls School

MMH

Francis Davidson

(NEW DEVELOPMENTS NOT INCLUDED IN DIAGRAM)

WORK IN PROGRESS