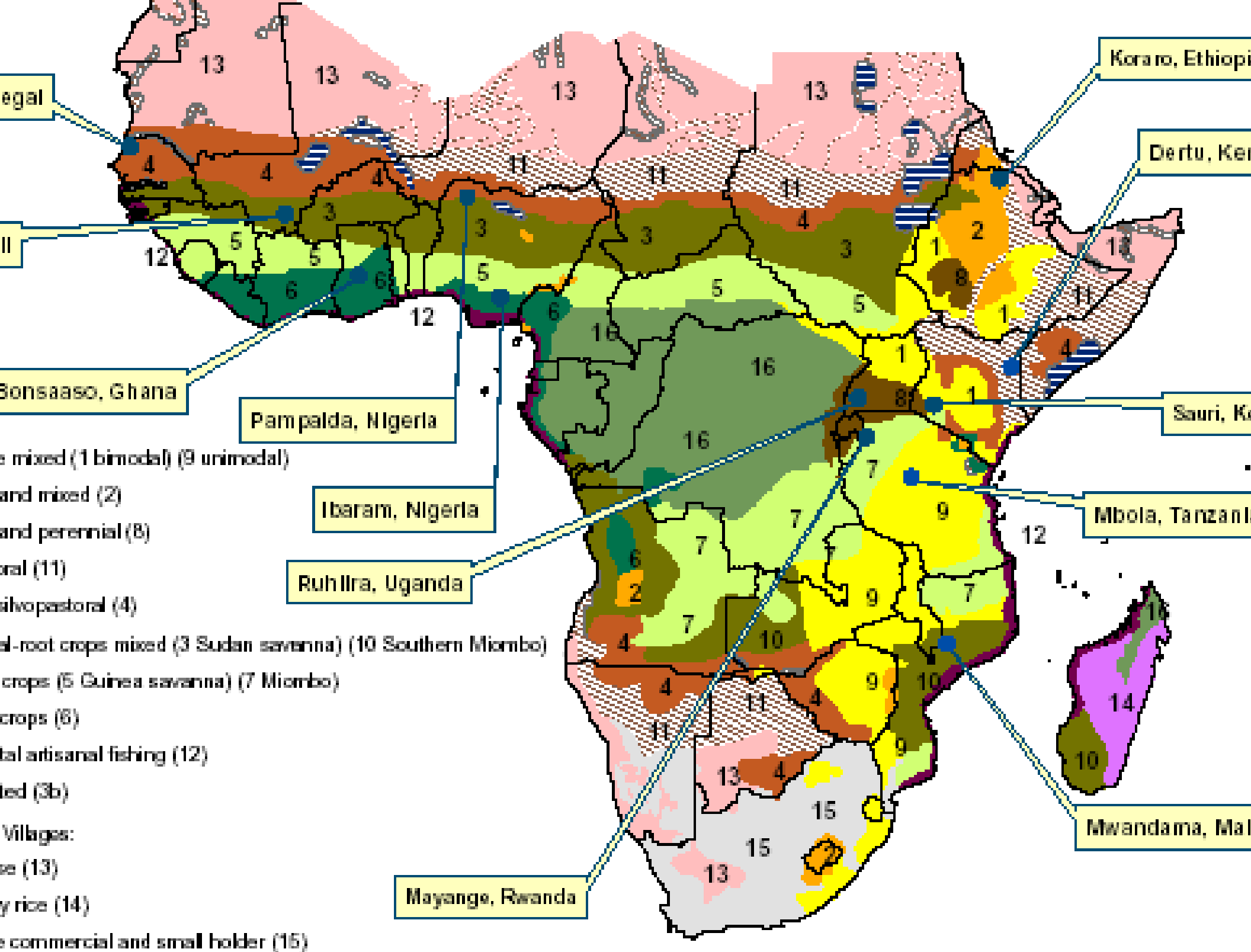


# WP “Village Network” Kihira, Uganda

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# Challenges

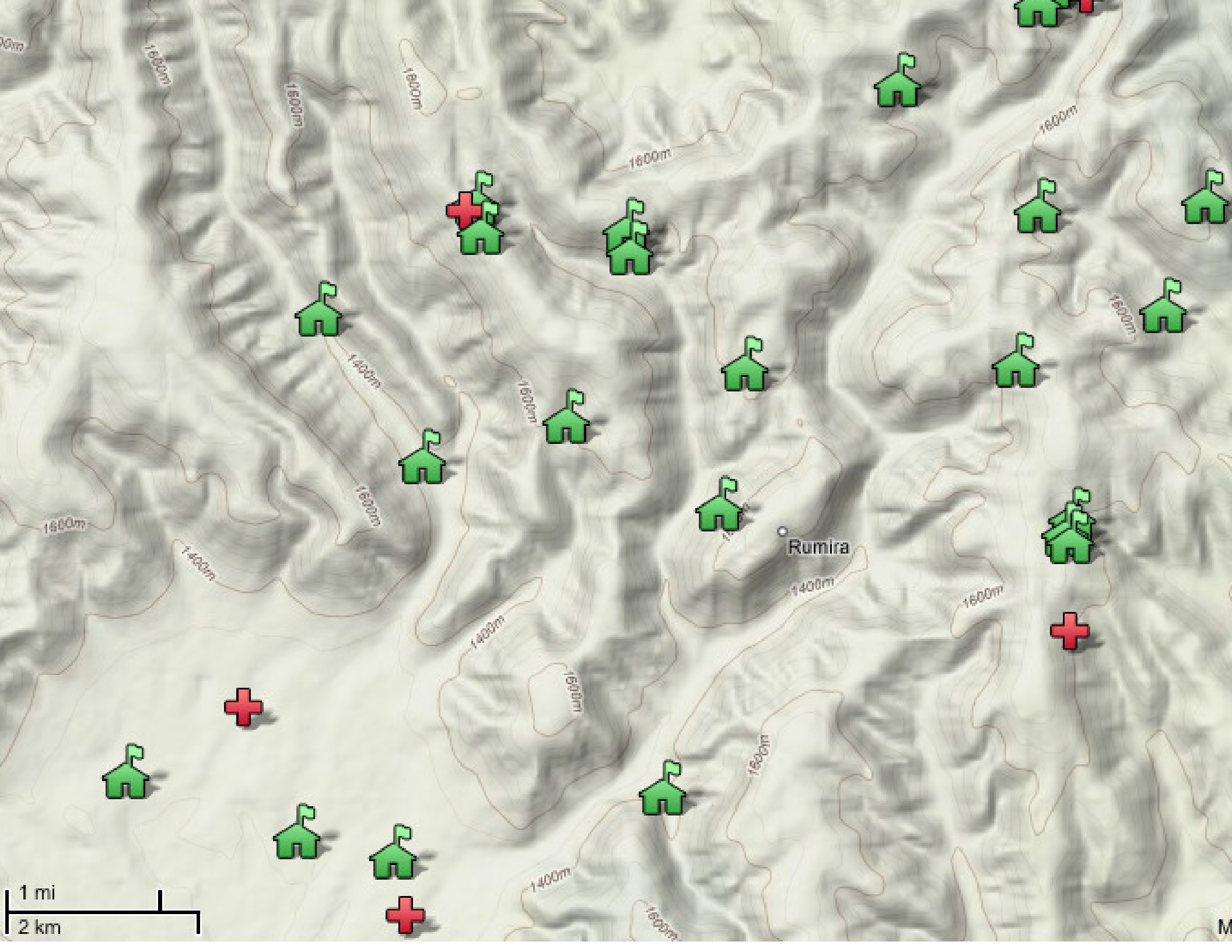
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existing Internet connectivity

nearest Internet at MVP Office 35KM away. Connection costs 1000/month for 128K!

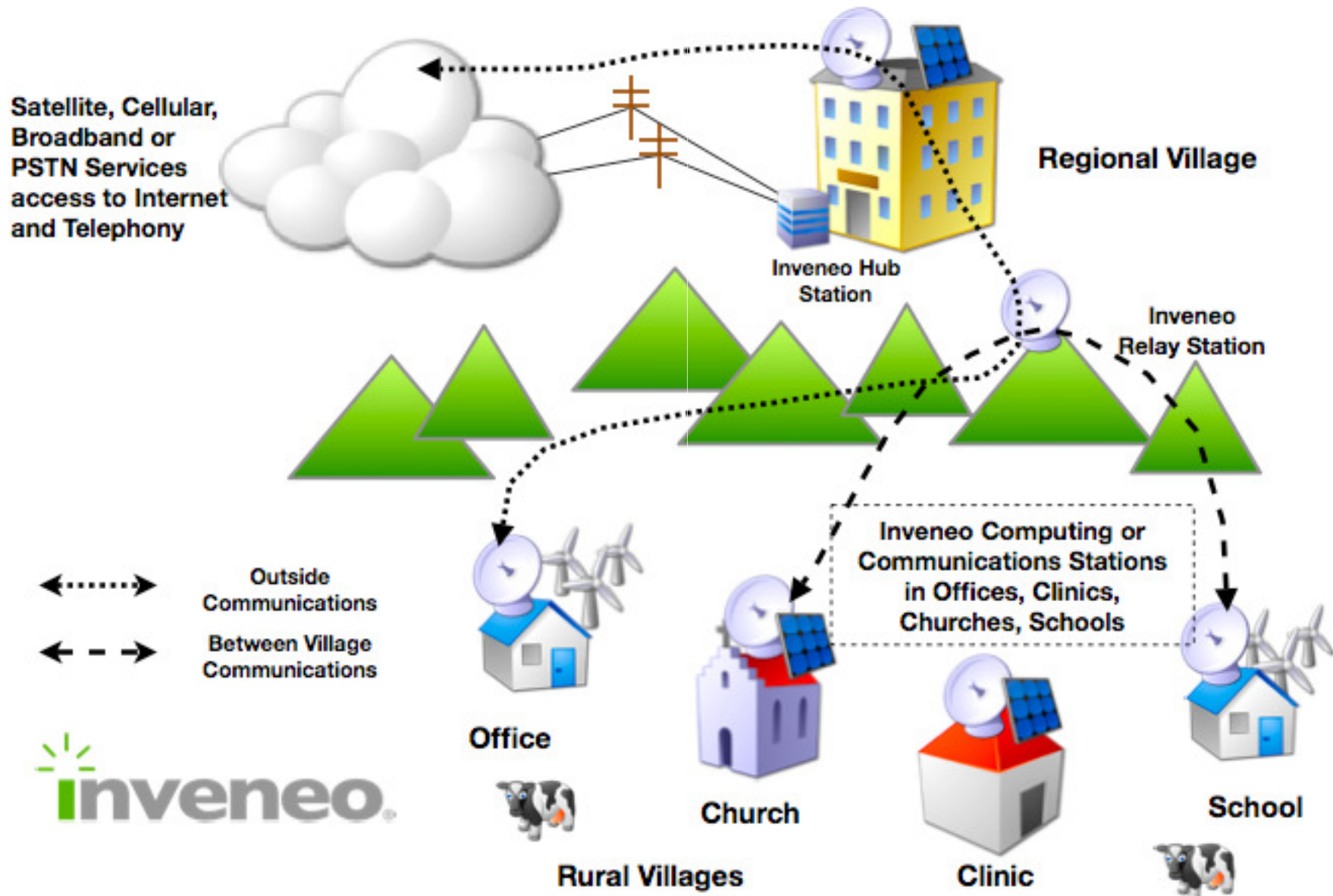
limited / Spotty cell phone coverage made calling between sites difficult. Cell phone calls also expensive.

lack of reliable power



# ution - Village Network

## Inveneo Communications System - Network



# Fi

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cheap + reliable

2.11 2.4GHZ

50KM+ with line of site

low risk - open source

IP PBX System



# Low Power Computers

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Low Power with screen

Power Savings vs 150W PC

Alternative 12V

Resistant to heat and dust!

Low cost \$469

Paired with Low Power Server (30W)

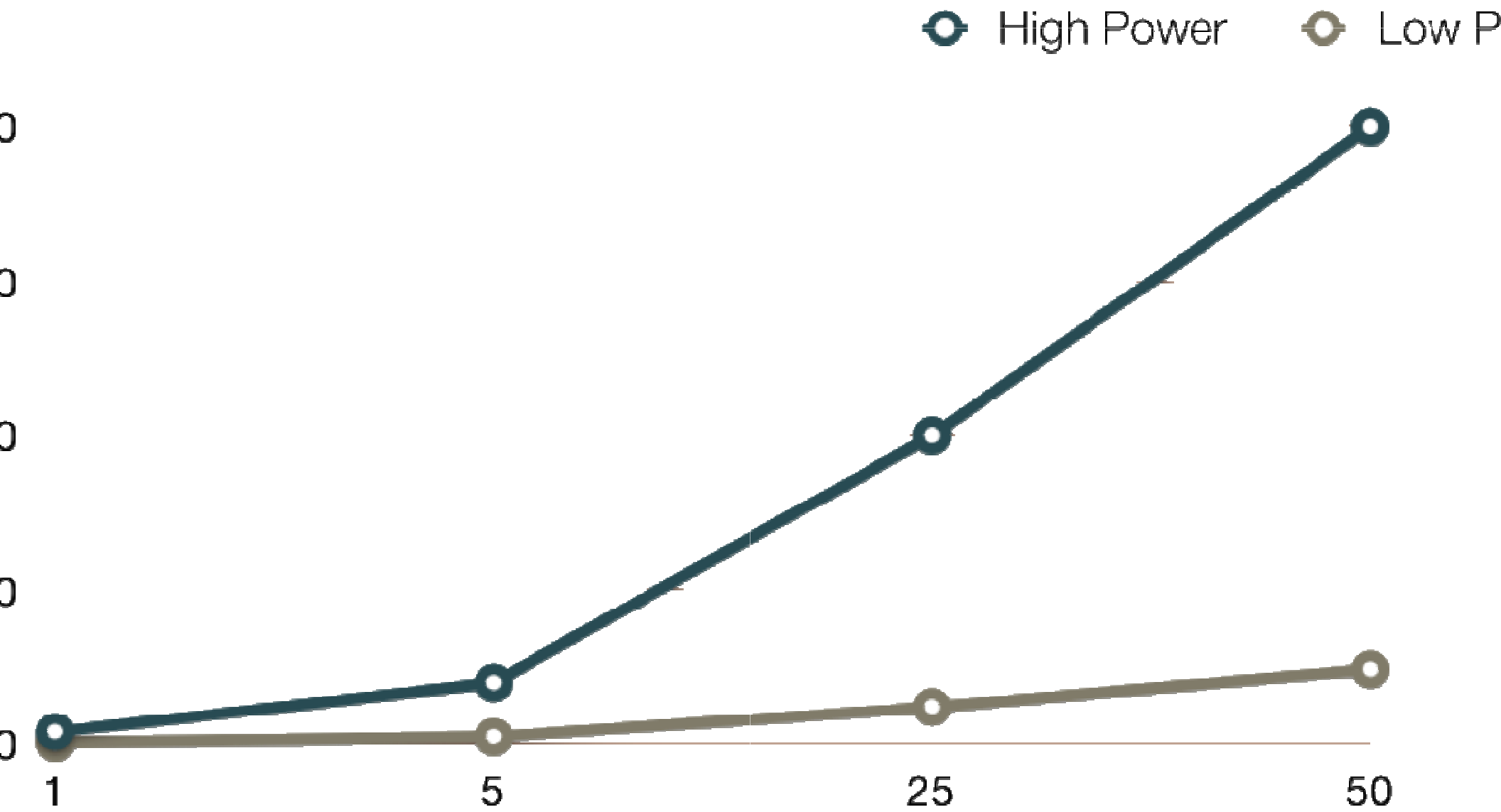


# Standard vs Low Power PC

	<b>1 Days</b>	<b>30 Days</b>	<b>365 Days</b>
<b>Standard PC (170W)</b>	\$0.82	\$24.60	\$299.3
<b>Lenovo Ion (20W)</b>	\$0.10	\$3.00	\$36.50

Assumptions: \$0.60 kW  
8 hours usage per day

# Potential Computer Power Consumption Per Year



# Capacity



# atures

y institutions linked via wifi to form  
bandwidth village intranet

ared Internet connectivity -  
cess to outside information

DIP - Free telephone calls between sites

age Website / Knowledge Management

lue in local network



# hiira, Uganda

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Health: 5 clinics connected 2 computers each + basic lighting for observation room

Education: 3 primary schools with 5 computers each + lighting

Community Center: 5 computers in computer room, 2 in Village Bank, 1 in Radio

Commodity Store: One computer connected to commodity exchange in Kampala

Water Office: 2 computers + network servers

Internet Relay to Mbarara

Radio tower relay + 10 - 10M Masts



