



PUBLIC PRIVATE PARTNERSHIPS FOR ACCESS TO COMMUNITY ELECTRICITY (PACE)

**Guidelines For Widening Access To Electricity
Through Public-private Partnerships**

ETHIOPIA





Overview

Population	70.1 m
Population growth rate	2.92
Urban/ rural mix	15%/ 85%
GNP per capita	US\$110
Inflation rate	4.8%
Literacy rate	32.8%



Status of Electricity

Power generation installed capacity	521 MW
Percentage of Elect. connection	5%
Percentage of Access to Electricity	13.4%
No. households connected	534,106
Total number of customers	680,325
Rural Access to Electricity	<1%
Electricity per capita consumption	25kWh



...Livelihood Impact

- Case study 1 – Yaye town
 - Powered by 170kVA microhydro power unit
 - 24 hour service
 - Partnership includes: Community, local development association, private sector
 - Benefits - Health
 - Improved health service with use of electrical diagnostic machines
 - Service extended 24 hours
 - Number of nurses and health officers increased (town became attractive to live)



...Livelihood Impact

- Benefits – Education
 - Evening school opened
 - Teachers turnover stopped (town became attractive to live)
 - Library facilities and study rooms (with light) available at night
 - Distance education possible through TV
 - Student get better education in their town (boys used to travel to neighboring towns for better education)
 - Positive gender outcome as girls too can get better education



...Livelihood Impact

Benefits – Job opportunities

- One metal workshop and three wood workshops opened
 - Carpenters get their products semi processed
- 4 grain mills installed



DFID KaR



...Livelihood Impact

- Benefits –Entertainment and Access to information
 - News and entertainment through TV and satellite TV in local bars and restaurants
 - Cold drinks
- Benefits – Security
 - Street lights
 - Security lights at home



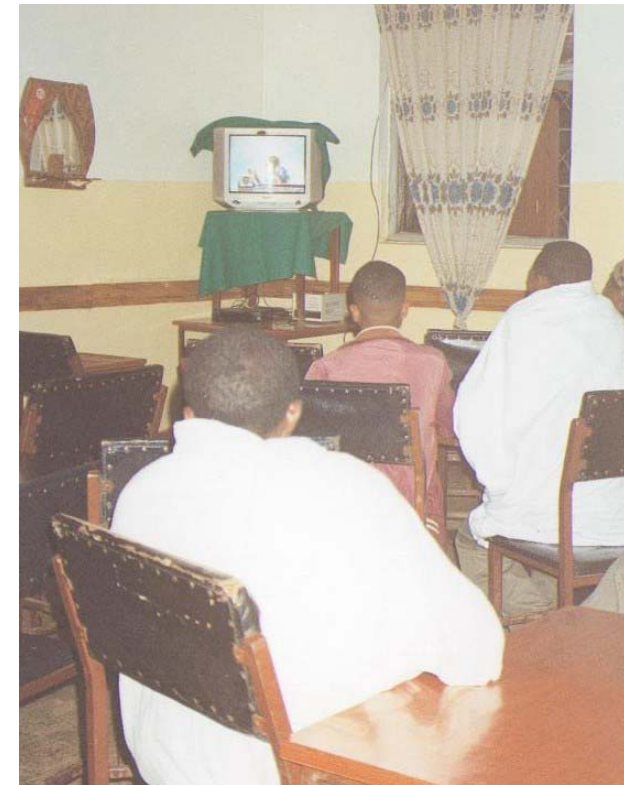
...Livelihood Impact

- Case study 2 &3
 - Bonosha town power by 115kVA diesel genset
 - Bona town power by 12 kVA diesel genset
 - Both are highly improvised and precarious
 - No PPP in any form



...Livelihood Impact

- Benefits
 - Lighting for domestic and commercial use
 - Extended service hours
 - Children can study at night
 - Make towns relatively attractive than the neighboring once
 - Attract local merchants
 - In one of them the clinic uses the power for refrigeration of medicines





Livelihood Impact of Electricity

- Experiences from case studies
 - Livelihood studies were carried out in three recently electrified rural towns
 - diesel units powered two of the schemes
 - Service was only in the evening
 - Ownership:
 - one was purely private
 - the other municipality
 - Micro-hydro power provides 24 hr service in one of the towns surveyed.



...Livelihood Impact

- Wider access characterized by
 - Significant livelihood Impact
 - Pro-poor consideration
- Limited access
 - Benefits: extending of working hours and evening study, but no income or social access developments
 - No benefit from indirect access



Public-Private Partnership

- Experience from case studies show that successful electrification schemes do have a good balance of PPP
- Local experiences show that attitudes toward partnership with the private sector is being seen in suspicion yet
- Partnership with the private sector is improving – works and service type of contracts are becoming common
- PPP is at a very lower stage of its development in Ethiopia



Current Opportunities

- Govt. Twin-track Strategy for RE
 - Grid based rural electrification
 - Private sector involvement in off-grid electrification
 - Incentives (rural electrification fund)
 - Interest free loans
 - TA and capacity building
- Market Potential
 - <5% electrified
 - More than 500 towns unelectrified yet
 - Off grid consumers are paying up to (200%) for alternative sources
 - Many off-grid consumers are able and willing to pay for electricity service (7 to 8 times more on kWh basis)



Challenges and Constraints

- Lack of Stakeholder Engagement and Co-operation
 - Understanding roles
- Lack of “Project Packagers” to implement projects
 - Assessment of community needs
 - Sectoral coordination and encouragement for maximizing livelihood benefits and pro-poor consideration
 - Resource mobilization (consultation with community, private sector, public, etc)
 - Information source
 - Feasibility studies and business plan preparation
 - Make projects bankable and attractive for developers



...Challenges and Constraints

- Adequate regulatory framework and enabling environment
- Awareness among communities and consumers
- Flexible and innovative financing mechanisms
- Adequate technical skill and experience (particularly in microhydro)



Recommendations

- Widening access to electricity needs a well focused and continuous donors consideration as opposed to sporadic inputs practices hitherto
- NGOs should play project packaging roles so that community/ off-grid electrifications become feasible
- Technical skill development and experience sharing for microhydro power development is highly needed.