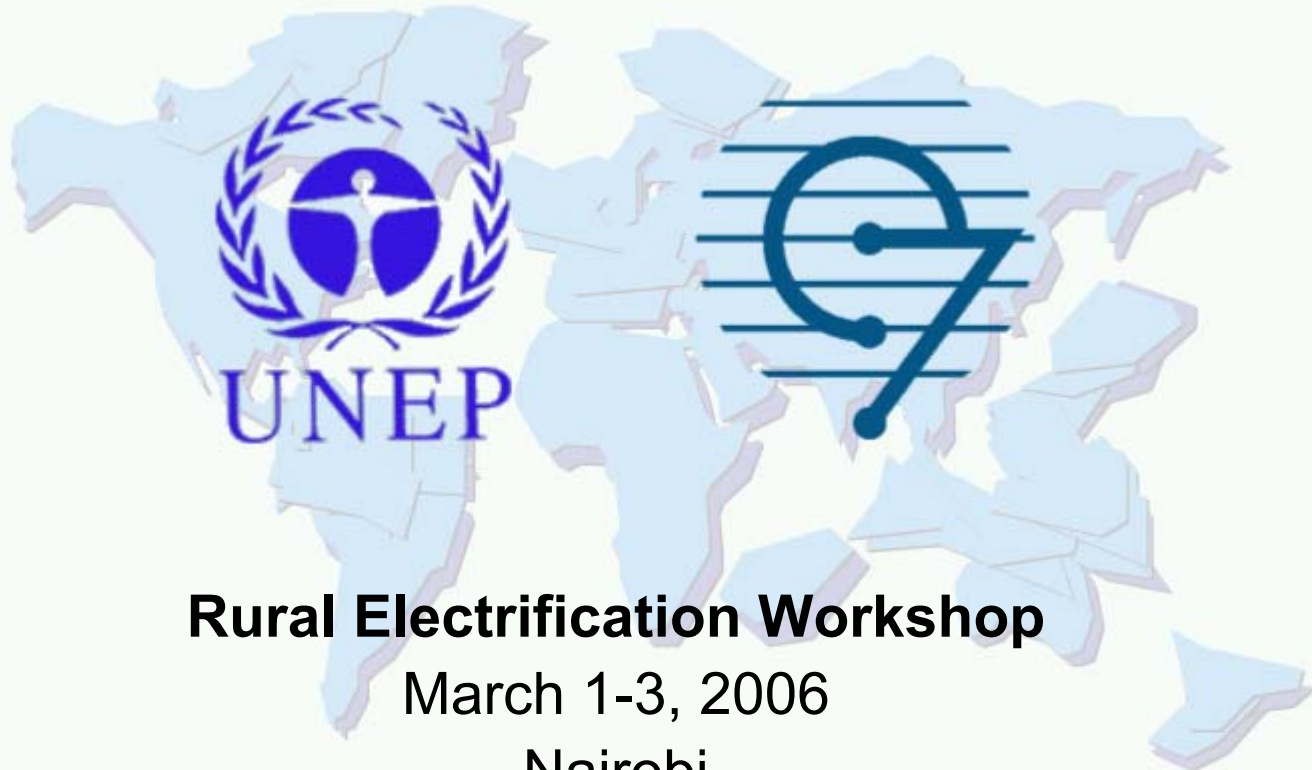


**Public-Private Partnership (PPP) for Rural Electrification:**

# **The Ethiopian Experience**

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# I. Background:

## Country Overview and Electricity Status



### 1.1 Country Overview:

Population:	77 million
Population growth rate:	2.92
Urban/ rural mix:	15%/ 85%
GNP per capita:	US\$100

### 1.2 Electrification Status and Access to Electricity:

Power generation installed capacity	700 MW
Percentage of Elect. connection	5%
Percentage of Access to Electricity	15%
No. households connected	650,000
Total number of customers	700,000
Rural Access to Electricity	<1%
Electricity per capita consumption	25kWh

## II. Is PPP a Viable Option for Rural Electrification? Three Case Studies



### 2.1 Case Study 1: Community Owned MHP (Yaye Town)

- Powered by 170kVA micro hydro power unit
- 24 hours service
- Partnership includes: Community, local development Association, Privet sector
- Benefits:
  - Improved health service, (diagnostic machinery, staff home lighting, ...etc),
  - Improved education (evening classes, distance education, ...etc),
  - Improved employment opportunities (new Jobs: wood and metal works, hotels, tea shops)
  - Entertainment and access ti information (TV, Radio)

NB: High level of PPP (community, local government and private sector)

### 2.2 Institution Owned Diesel genset: Bonosha Town

- Donated by Min of Health to Bonosha Health Center
- 75KVA later upgraded to 115KVA to meet towns demand
- Highly improvised, poorly installed by local untrained/unskilled technician
- Frequent breakdown, several months of blackout
- Tariff does not cover costs
- Evening hours only, usually for lighting

NB: No or very weak PPP

### 2.3 Privately Owned Diesel Genset: Bonna Town)

- 12 kVA diesel genset
- Ownership and management 100% private
- Highly improvised and precarious
- Consumers complain about high tariff and poor, unreliable services
- Poorly and even dangerously installed mini-grid
- Supplier complains about power theft

NB: No PPP in any form

## II. Is PPP a Viable Option for RE? ..... Cont'd



### 2.4 Summary of PPP Experiences:

	KEY STAKEHOLDERS AND ROLES			Outcome	Notes
	PUBLIC	CIVIL SOCIETY	PRIVATE SECTOR		
<b>BONOSHA</b>	<b>1. Local Authority</b> <ul style="list-style-type: none"> <li>• Finance</li> <li>• Subsidies</li> <li>• Tariff-setting</li> <li>• Management</li> <li>• O&amp;M</li> </ul>	<b>1. Community members</b> <ul style="list-style-type: none"> <li>• Finance</li> <li>• Labour</li> <li>• Installation</li> </ul>	<b>1. Private individual</b> <ul style="list-style-type: none"> <li>• Installation</li> </ul>	Low Performance Restricted Access (LPRA)	<p>Private sector involvement minimal - limited to installation by an untrained technician.</p> <p>Local authority was not trained for management of the scheme; billing, etc. was absorbed into existing administrative processes.</p> <p>Tariff-setting lacked community involvement and clear guidance. Methods were simply adapted from those used by neighbouring towns.</p>
<b>Involvement</b>	HIGH	HIGH	LOW		
<b>YAYE</b>	<b>1. Local Authority</b> <ul style="list-style-type: none"> <li>• Initiation</li> <li>• Community mobilisation</li> </ul> <b>2. Irish Aid</b> <ul style="list-style-type: none"> <li>• Donor-funding</li> </ul> <b>3. Sidama Development Programme</b> <ul style="list-style-type: none"> <li>• Administration of funds through grant.</li> </ul>	<b>1. Community members</b> <ul style="list-style-type: none"> <li>• Tariff-setting</li> <li>• Labour</li> <li>• Provision of equipment</li> </ul>	<b>1. Sidama Development Corporation</b> <ul style="list-style-type: none"> <li>• Design</li> <li>• Procurement</li> <li>• Installation</li> <li>• Tariff-setting</li> <li>• Management</li> <li>• O&amp;M</li> </ul>	High Performance Wide Access (HPWA)	<p>High level of private sector involvement has been beneficial for the scheme but may threaten sustainability when management is handed over to the community or local authority.</p> <p>Tariff study and community involvement in tariff-setting has led to fair tariff that community is willing to review in the future.</p>
<b>Involvement</b>	HIGH	HIGH	HIGH		
<b>BONNA</b>	<b>1. Local Authority</b> <ol style="list-style-type: none"> <li>1. Permission</li> </ol>	<b>1. Community members</b> <ol style="list-style-type: none"> <li>2. Initial tariff-setting</li> </ol>	<b>1. Local Entrepreneur</b> <ol style="list-style-type: none"> <li>3. Finance</li> <li>4. Installation</li> <li>5. Tariff-setting</li> <li>6. Management</li> </ol>	Low Performance Restricted Access (LPRA)	<p>Private sector involvement has been very high and has not been checked, resulting in poor quality service and dissatisfaction.</p> <p>Although the community was involved in the initial tariff-setting, later adjustments were not carried out in a transparent way, leading to mistrust.</p> <p>Community is willing to provide finance and effort to improve the service.</p>
<b>Involvement</b>	LOW	LOW	HIGH		

## II. Is PPP a Viable Option for RE? ..... Cont'd



### 2.5 Barriers and Challenges for PPP as an Option for RE

- Public and Private sectors, natural but RELUCTANT partners
- Tendency to see government as the sole electricity supplier, highly politicized
- Remote isolated communities live in darkness not only of light but also information, (lack of awareness among communities and consumers)
- Private sector usually seen as reckless “ROBBERS” by communities, suspicion and negative attitudes toward private sector
- False election promises by politicians (over a dozen of non energized grid in south western Ethiopia to date)
- Poor technical and managerial skills among private sector electricity suppliers
- Lack of innovative financing mechanism
- Lack of adequate regulatory framework and enabling environment
- Lack of Engagement b/n stakeholders
- Lack of Project Packagers (studies, information, design, business plan)

# III. Key Lessons and Recommendations



## 3.1 Key Lessons Learned:

1. Balanced and well defined public and private sector roles (Eg. Yaye)
2. Planning to meet not only current but also future demand for electricity (Yaye)
3. Transparency and Involving community members during tariff setting (Bonna)
4. Affordability is not always the main reason for the lack of access to electricity. Equally important are:
  - Quality and,
  - Reliability of electricity service (Bonna)
5. Financial sustainability through cost recovery tariff and skilled management (Yaye)
6. Schemes installed and run by untrained/unskilled private sector people suffer losses and bad reputation (Bonosha)
7. Finance is not always the main problem for initiating PPP schemes for rural electrification (Eg. Bonna Community raised more than enough)
8. Lack of information by and lack of communication between the public sector and the private sector was a serious problem in mobilizing resources for RE projects.

# III. Key Lessons... Cont'd



## 3.2 Recommendations: What Needs to be done to make PPPs work better

1. Local authorities should be involved in local level planning
2. Simple guidelines for tariff setting should be prepared and made available at community level
3. Access to information by community members (on how to develop a scheme) should be improved
4. Private sector operators' technical and managerial skills need to be upgraded

# END OF PRESENTATION



**THANK YOU !!!**