

PACE

Public Private Partnerships for Access to Community Electricity Ethiopia, Nepal, Sri Lanka and Uganda

Rural electrification – a paradigm shift Community electricity in developing countries

Mike Bess, Director International, ESD

Final Project Workshop - London 11th December 2003

Outline



- Definition community electricity
- Brief history of community electricity
- Rural electrification in the South
- Community electricity post-WWII
- Twin trends decentralisation & energy sector liberalisation
- Awareness raising & capacity building
- Parallels in other sectors
- Millennium development goals
- Transforming rural sectors increased productivity & increased 'access'
- A new paradigm

Community electricity definition



Community electricity is electrification that:

- Brings stakeholders together to define their needs & seeks to forge partnerships amongst key players, both suppliers & consumers
- Involves local stakeholder participation
- Addresses issues of public access, particularly education, health, clean water, public lighting
- Benefits the community as a whole

Brief history



- Community electrification historically has two origins:
 - >Private sector
 - >Co-operatives, community-based
- Primarily rural in origin strongly linked to co-op movement
- USA in 1930s (NRECA), Denmark 1930s & 1940s
- Took place when countries were predominantly urban
- Northern governments move to support electrification of last 25% of population
- Massive subsidies & supports

Rural electrification in the South



- In North, urban 70-80% create surplus to finance electrification of 20-30% rural
- In South, 70-80% of population live rural
- Urban is heavily subsidised by taxing rural
- Urban unable to subsidise rural electrification
- The 70-80% rural cannot afford traditional, grid extension electrification
- Latin America, Southeast Asia begin rural electrification co-operation 1950s, 1960s
- Much modelled on US mid-West co-operatives

Rural electrification in the South (cont)



- However, co-operative model not chosen by bulk of Southern countries
- Monopoly electricity companies lead the way
- Rural continues to be neglected in most countries, with few exceptions
- China, India, Argentina, Brazil, Thailand, later South Africa all adopt massive rural electrification programmes
- Few poor developing countries can afford rural grid-based – population too scattered, so, rural electrification slow

Community electricity post-WWII



- Rural co-operative movement grows rapidly in L America, Caribbean, South & Southeast Asia post-WWII
- Grows rapidly in rural credit in 1950s & 1960s
- Expands from agriculture to agro-processing, roads, water, and, in exceptional cases, electrification
- Strongly supported by donors (US, Sweden, in particular)
- Builds upon rural credit co-operatives, but, becomes too political by late-1960s

Decentralisation & liberalisation



- 1990s sees major move to decentralise government throughout the world – gives local governments more powers, responsibilities
- Simultaneously, energy sector starts major liberalisation in 1990s
- Liberalisation & decentralisation begin to converge in co-operative, public-private electrification by late-1990s
- Donors, particularly World Bank, Swedes, Norwegians, support this in a big way

Awareness raising & capacity building



- Major element of all decentralisation depends upon giving local authorities skills to enable
- As case studies show, without skills, decentralisation is ineffectual
- Donors & host governments must provide major support for awareness raising for all rural development, from environment to government, to infrastructure
- Major moves, primarily through international associations of local authorities to build capacity for good governance, technical capacity

Parallels with other sectors



- Electricity is becoming in early-21st Century what water was in 1980s
- Emphasis in all rural infrastructure is changing as part of decentralisation & local empowerment
- 'Small is beautiful' is increasingly the operating mode
- Facilitation, through specialised agencies and funds become common
- Rural electrification begins to mirror water, roads, health

What is needed to increase 'access' from low levels to high levels in South?



- The traditional, national monopoly electricity model will not work for most rural Southerners
- 'Access' to electricity in much of rural South is still less than 30%
- To shift this, requires major rethink
- Electricity is essential for 'rural transformation'
- Rural transformation involves:
 - > Livelihood transformation & improvements
 - > Economic revolution by increasing rural value added
 - > Environmental sustainability
 - > Social equity
 - > Increased access by ALL to social services

Millennium Development Goals



- Eradicate extreme poverty & hunger
- Achieve universal primary education
- Promote gender equality & empower women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development

Rural electrification – a new paradigm



- Grid-based is only part of solution
- Need decentralised generation
- Need to develop local partnership between public & private, key stakeholders
- Need over-riding legislation to enable local electricity generation, distribution, sales
- Need regulatory system to support, promote
- Need stakeholder involvement
- Need to focus BOTH on electricity for economic development ('power for productive uses') & for improved access (mostly millennium goals)

Rural electrification – a new paradigm – the productive uses side of equation



This 'model' helps stimulate local economies:

- Attracts investment
- Stimulates other local economic sectors
- Creates new employment
- Generates revenues both for local governments & for national governments
- Helps raise incomes
- This, in turn, increases purchasing power, further stimulates local economy
- Adds value to all local production => means of lifting rural areas out of poverty

Rural electrification – a new paradigm – the increased energy access side



This 'model' helps increase 'access':

- Provides service sector with new energy
- This enables better, cheaper delivery of services (health, education, water)
- Increases quality of life
- Millennium goals services primary education, health, maternal care, etc. – should be open to all
- If open to all, then electrification increases access to all
- Access to electricity should not mean 'a light bulb in every house'

Rural electrification: community **electricity = public-private partnerships**



The new paradigm requires all key stakeholders to participate – it is truly community electrification – to transform rural economies, unlock their social, political & economic energies.

Conclusions: Key issues from case studies



- Local level developing true, equal partnerships
- Role of national governments
- Role of donors
- Identifying & gauging impacts
 - >Livelihood
 - >Economic
 - >Millennium development goals

Key issues from case studies



How does one develop "equal" partnerships between local government & investors

- Trust
- Capacity of local government
- Understanding of government needs by private sector
- Understanding of consumers of role of private sector

Role of government



National role?

- Legislative & legal framework
- Regulation & licensing
- Financing
- Awareness raising
- Facilitation & intermediation of stakeholders
- Local government
- Mobilisation
- Permits
- Licenses
- Support

© ESD 2003

Role of donors



Working with national governments

- Legislative & legal framework
- Regulation & licensing
- Financing
- Awareness raising

Other

- Transferring best practices, lessons learnt from one country to another
- Develop case studies showing diversities & similarities for various applications

• Lessons on incentivising stakeholders

Rural electrification impacts



What are they & how are they gauged?

- Economic
- Services health, education, water, etc.
- Income generation
- Gender impact
- Access by poorest, least enfranchised elements

Livelihood impacts & millennium development goals

- Environmental effects
- Forging global partnerships