Group Discussions Guidelines

Discussion Topics

Group 1: Policy and Regulatory Options for Enhancing Rural Electrification within a Reforming Power Sector

Moderator: Ms. Irene M. Nafuna-Muloni

Rapporteur: Dr. Nicolas Mariita

Presenter of Group's Findings: *To be appointed by group members*

Group 2: Policy and Regulatory Options for Increasing Electricity Access While Ensuring Financial Viability of Electricity Distribution Utilities

Moderator: Dr. Njeri Wamukonya

Rapporteur: Dr. Akanksha Chaurey

Presenter of Group's Findings: *To be appointed by group members*

Group 3: Policy & Regulatory Options for Enhancing Electrification through Private Investment

Moderator: Dr. Brij. Kishore Baguant

Rapporteur: Mr. Dison Okumu

Presenter of Group's Findings: *To be appointed by group members*

Discussion Guidelines for Group 1

Topic: Policy and Regulatory Options for Enhancing Rural Electrification Within a Reforming Power Sector

Moderator: Ms. Irene M. Nafuna-Muloni

Rapporteur: Dr. Nicolas Mariita

Presenter of Group's Findings: *To be appointed by group members*

Background

An estimated 57% of the world's poor (about 1.6 billion people) do not have access to electricity (see table below) and a significant portion have limited or no access to cleaner and more modern fuels such as kerosene, LPG and natural gas. Furthermore, without major policy action and increase in investment in the electricity sector it is projected that by 2030, 1.4 billion people will still lack electricity. A significant proportion of this number is expected to be in sub-Saharan Africa.

Urban and Rural Electrification Levels (2000)

	Urban (%)	Rural (%)	National (%)
Developing Countries	85.6	51.1	64.2
Middle East	98.5	76.6	91.1
East Asia/China	98.5	81.0	86.9
Latin America	98.0	52.4	86.6
World	91.2	56.9	72.8
South Asia	68.2	30.1	40.8
Africa	63.1	16.9	34.3
Sub-Saharan Africa	48.9	9.9	21.7

* Excluding South Africa

Sources: World Bank, 2003; World Bank, 2004; IEA, 2002; GNESD, 2003; EDF Group, 2002.

The poor in developing countries face, inter alia, three key energy challenges:

- Reliance on biofuels that harm human health and the environment.
- Inadequate access to cleaner energy services, such as electricity, for productive purposes and institutional applications.

- Incomes that are too low (as well as limited access to appropriate financing schemes) to allow the poor to procure cleaner and more sustainable energy services, such as electricity, that are more expensive[1].

In the last two decades, sub-Saharan African (SSA) countries have implemented a wide range of energy sector reform initiatives, which were expected to, inter alia, address some of the above concerns. Initial indications from a wide range of SSA countries, however, seem to indicate that few of these reform initiatives have resulted in significant improvement in the provision of electricity services to the poor.

What is particularly worrisome about the above challenges is the deterioration in some countries in quality and reliability of energy services available to the poor in spite of numerous energy reform initiatives. In sub-Saharan Africa the reliance on traditional biofuels is increasing and the proportion[2] of unelectrified people continues to grow.

Expected Outcomes and Key Discussion Points

This group is expected to provide a cursory assessment of the impact of power sector reforms on the electrification of the poor in sub-Saharan Africa. In addition, the group will provide suggestions for consideration by policy makers in sub-Saharan African countries on possible policy options and regulatory measures that can improve electricity access to the poor, especially those in rural areas.

To guide the group discussions, the key discussion questions/issues are provided below:

1. How do you assess the impact of power sector reforms in sub-Saharan Africa especially with regard to contributing to improving rural electrification levels?
   a) Positive
   b) Negative
   c) Neutral

Please provide detailed explanation for your answer and possibly 2 or 3 sub-Saharan African country examples.

2. Propose 2 - 3 policy options can be implemented to enhance rural electrification levels. Where possible, please provide 1 or 2 developing country examples where the options have been successfully implemented.

3. Propose 2 - 3 regulatory measures that can be implemented to enhance rural electrification levels. Where possible, please provide 1 or 2 developing country examples where the options have been successfully implemented.

[1] Up-front costs of associated devices and appliances for cleaner and renewable energy options are often prohibitive for the poor.

[2] In other words, although the absolute number of people with electricity is increasing, the rate of electrification is outpaced by population growth (Radka, 2002). In many sub-Saharan African countries electrification rates are below population growth rates.

Discussion Guidelines for Group 2

Topic: Policy and Regulatory Options for Increasing Electricity Access While Ensuring Financial Viability of Electricity Distribution Utilities

Moderator: Dr. Njeri Wamukonya

Rapporteur: Dr. Akanksha Chaurey

Presenter of Group's Findings: *To be appointed by group members*

Background

An estimated 57% of the world's poor (about 1.6 billion people) do not have access to electricity (see table below) and a significant portion have limited or no access to cleaner and more modern fuels such as kerosene, LPG and natural gas. Furthermore, without major policy action and increase in investment in the electricity sector it is projected that by 2030, 1.4 billion people will still lack electricity. A significant proportion of this number is expected to be in sub-Saharan Africa.

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In most cases, market-led reforms which are primarily designed to improve the financial health of electricity companies, have been introduced into sub-Saharan African countries where a large sector of the potential "market" consists of very poor people. Looking at this, for a moment, from the point of view of a reformed utility can help to clarify the situation.

Expansion of access to electricity to the poor means attempting to service low-income consumers whose incomes may well be highly unstable and who often live in isolated rural areas that are difficult to access. To provide services, companies have to cover operating and investment costs (required by market oriented reforms) while providing expensive transmission lines and connections, as well as maintenance, billing and collection services in a market where return on investment is far from being assured.

In the majority of the SSAn countries, these contradictory demands have proved to be irreconcilable. It is, therefore, not surprising that electricity companies have tended to "cherry pick" the most lucrative markets, have raised their tariffs and have been tempted to ignore widening of their networks to poorer consumers especially in rural areas.

Expected Outcomes and Key Discussion Points

The key objective of this group is to provide policy makers in sub-Saharan African countries with suggestions on possible ways of conducting rural electrification and without affecting the financial viability of the electricity distribution utility. The case example of how Zimbabwe's electricity utility successfully implemented rural electrification while observing financial viability will be provided during the presentation by Eng. S.E Mangwengwende at Session 3 of the Workshop.

The group is expected to propose innovative options that could enable increased electricity access among the poor without adversely affecting the utility's financial performance. For example, there are low-cost technical[3] and non-technical[4] options suitable for rural electrification used in many developing countries in Asia and Latin America. This group should, therefore, propose how such options can be integrated within the existing policy and regulatory framework and/or what changes should be made to the current framework to facilitate their implementation.

To guide the group discussions, the key discussion questions/issues are provided below:

1. In overall terms, how would you rate the priority given by power sector reforms to increasing electricity access among the poor, especially in rural areas, compared to other issues such as enhancing financial performance of the national utility?
   a) High
   b) Low
   c) Equal

Please provide a detailed explanation for your answer and possibly 2 or 3 sub-Saharan African country examples.

2. Propose 2 - 3 policy options that can be implemented to enhance rural electrification levels without adversely affecting the utility's financial performance. Where possible, please provide 1 or 2 developing country examples where the options have been successfully implemented.

3. Similarly, propose 2 - 3 regulatory measures that can be implemented to enhance rural electrification levels without adversely affecting the utility's financial performance. Where possible, please provide 1 or 2 developing country examples where the options have been successfully implemented.

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[3] Examples of low-cost technical options include the use of: longer distances between transformers; single wire earth return; shorter, smaller poles; smaller conductors; pre-fabricated wiring systems (e.g. ready boards); high mast community lighting systems; load limiters, equipment standardization, etc.

[4] Examples of non-technical options include: flat-rate tariffs; appropriate credit schemes; community electricity service points; review of costing of rural electrification projects.

Discussion Guidelines for Group 3

Topic: Policy & Regulatory Options for Enhancing Electrification through Private Investment

Moderator: Dr. Brij. Kishore Baguant

Rapporteur: Mr. Dison Okumu

Presenter of Group's Findings: *To be appointed by group members*

Background

An estimated 57% of the world's poor (about 1.6 billion people) do not have access to electricity (see table below) and a significant portion have limited or no access to cleaner and more modern fuels such as kerosene, LPG and natural gas. Furthermore, without major policy action and increase in investment in the electricity sector it is projected that by 2030, 1.4 billion people will still lack electricity. A significant proportion of this number is expected to be in sub-Saharan Africa.

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Many sub-saharan African countries have been undergoing reforms partially targeting restructuring the electricity sector to improve performance (increase access to electricity, reduce technical and financial losses, etc) and attract private sector investment. The changes have mainly been two-pronged, namely structural and ownership changes.

The structural changes have concentrated on the functional unbundling of the utilities, to enhance transparency while ownership changes were mainly designed to increase private sector investment and involvement. In practice reforms in most SSAn countries have been largely designed to facilitate foreign private investors. Wider access to electricity was often treated as a lower order objective. Although local private investors, particularly SMEs, could prove effective in bringing electricity to the poor, reforms have made few serious attempts to involve local SMEs. One of the options of involving the

local private investors is to outsource some of the activities/services of the power utility to small and medium-scale enterprises (SMEs)[5, 6]. The involvement of SMEs could strengthen local support for power sector reforms. In Africa, indeed like in most developing countries, the private economy is almost entirely comprised of SMEs which are frequently the only realistic employment opportunity for the majority poor. Involvement of local SMEs in reforms has the potential of not only expanding access in a cost-effective fashion but could also yield substantial jobs generation and poverty reduction benefits.

On how SMEs in the electricity sector could assist in reaching the poor, there are useful lessons to learn from reforms of the telecommunications sector in SSA which appear to have contributed to dramatically increasing access to telephone and internet services among the poor. This is unlike reforms in power sector which have hardly led to increased electricity access among the poor. While the increased access to telecommunication services among the poor can be attributed to increased competition among service providers and the introduction of pro-poor tariffs, the success of the telecommunications sector in reaching this target group is largely due to the mobilization of SMEs in playing a substantial role in the provision of key services such as vending the telephone and internet services.

Expected Outcomes and Key Discussion Points

Building on some of the options proposed by Mr. M. Tse during Session 3, this Working Group is expected to propose policy and regulatory options that could lead to the involvement of the private sector, especially local SMEs, to enhance electricity access among the poor.

To guide the group discussions, the key discussion questions/issues are provided below:

1. Propose about 5 innovative ways in which SMEs can be involved in the electrification of the poor. Where possible, please provide country examples in which the proposed ways of involving SMEs have been implemented.

2. Propose 2 - 3 policy options that can be implemented to ensure the involvement of SMEs in the electrification of the poor. Where possible, please provide 1 or 2 developing country examples where the options have been successfully implemented.

3. Similarly, propose 2 - 3 regulatory measures that can be implemented to ensure the involvement of SMEs in the electrification of the poor. Where possible, please provide 1

[5] Generally, 'an enterprise' refers to any income-generating activity. 'Micro enterprises' usually have up to 10 employees, 'small enterprises' have 11 – 50 employees, while the 'medium enterprises' have 51 – 100 employees.

[6] World Bank's SME department defines micro-enterprises as those entities with up to 10 employees, total assets of up to US$100,000 and total annual sales of up to US$100,000; small enterprises – up to 50 employees, total assets of up to US$3million and total sales of up to US$3million; and medium enterprises – up to 300 employees, total assets of up to US$15million and total annual sales of up to US$15million.

or 2 developing country examples where the options have been successfully implemented.