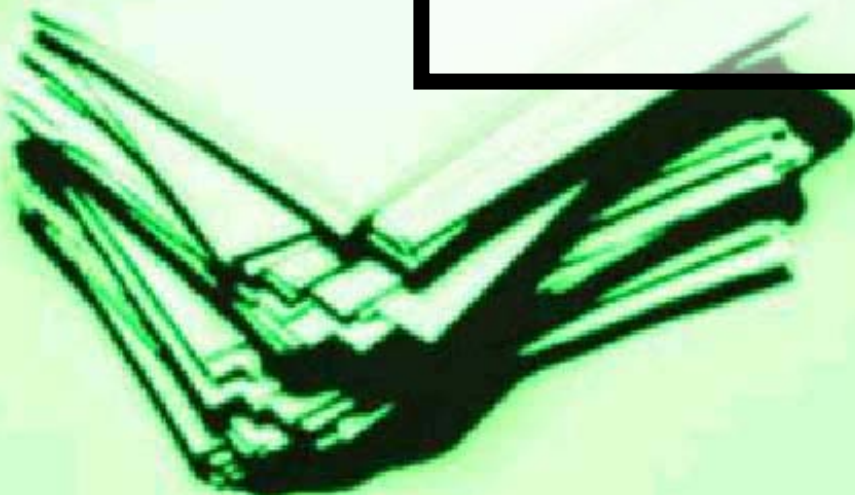


A stack of papers or documents, slightly blurred, with a purple and blue color scheme.

# Status and Trends of Ethiopian Rural Electrification Fund

A close-up of an analog clock face, showing numbers 1 through 12, with a yellow and orange color scheme.

By  
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REF Project Coordinator  
November 2006





# 1. Introduction

- Ethiopia is a country of about 80 million population and covers 1.1 million Sq.Km.
- 85 % of the population lives in rural areas
- Access of electricity is about 16 % , most of these customers consume less than 50 Kwh.
- Rural areas electricity coverage is negligible

## 2. Rural Electrification Fund

- Rural Electrification Fund was established by Proclamation No.317/2003
- To provide loan and technical service for Rural Electrification Projects
- To encourage utilization of electricity for productive uses and on improving energy availability and quality of rural service sectors



### 3. Off-Grid Rural Electrification

- Off-Grid Rural Electrification covers areas that will not be covered by the Grid Electricity due to energy economics of power transmission and hence is complimentary to Grid Rural Electrification
- In the Ethiopian context , Off-Grid is that area that will not be covered by Ethiopian Electric Power Corporation(EEPCo) ten year system expansion plan
- The Ethiopian Rural Electrification Executive Secretariat (EREES) has developed an indicative Off-Grid Rural Electrification Master Plan



# 4. Off-Grid Rural Electrification Master Plan

- The Off-Grid Master Plan identifies rural electrification projects
- It has developed a least cost development plan for Off-Grid rural electrification and proposed a phased action plan and investment requirements
- The Master Plan aims at determining settlements attractive for Off-Grid rural electrification projects
- Attractive means that the settlement is assumed to make a significant contribution to reduce poverty and that the project is affordable



## Contd.

- The Master Plan focused on settlements, with large population, high population density areas, accessible by road and areas with high agricultural productivity
- The Master Plan propagates technical neutrality for power supply options
- The Master Plan is based on a powerful GIS tool, developed in the context of Rural Electrification Fund projects



## Contd.

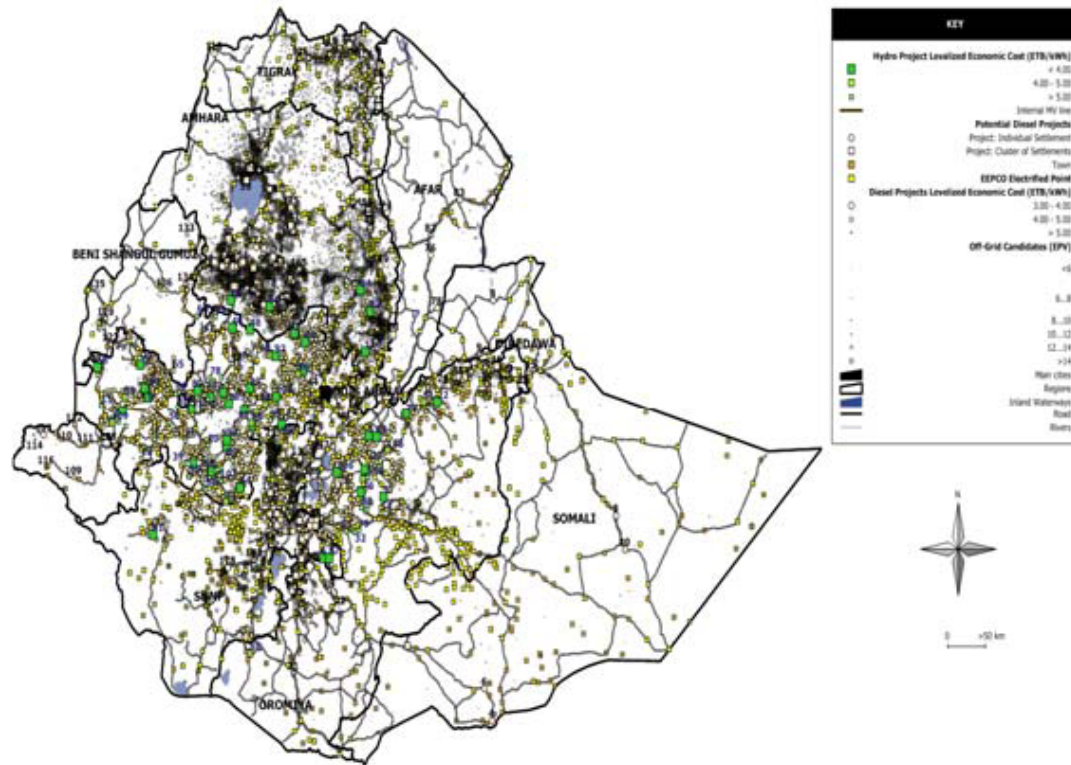
- The GIS of the Master Plan allows complex issues to be viewed clearly through multi-layered maps
- The GIS tool aims to assist decision makers towards Off-Grid rural electrification project prioritization



# Contd.

## ETHIOPIAN OFF-GRID RURAL ELECTRIFICATION MASTER PLAN Off-Grid Rural Electrification Projects : Potential Hydro Power & Diesel Projects MAP 1

Scenario: 66% scattered population  
Rural Electrification Executive Secretariat (REES)  
29/03/2006







## 5. Present Status of REF

- 240 Off-Grid Projects are in the pipe line
- 12 Projects are implemented
- 5 Projects are under implementation
- 6 MHP Projects under Tendering Stage
- 300 PV Systems for Health Posts and Primary Schools under Tendering Stage
- 44 are approved for loan
- TA for cooperatives provided



## Contd.

- USD \$ 1.3 million disbursed
- Delay of fund replenishment
- Shortage of fund compared to the large project pipeline ( committed USD\$8 M , while present requirement min. of USD\$20 M).
- Potential slow down of approval process

## Contd.

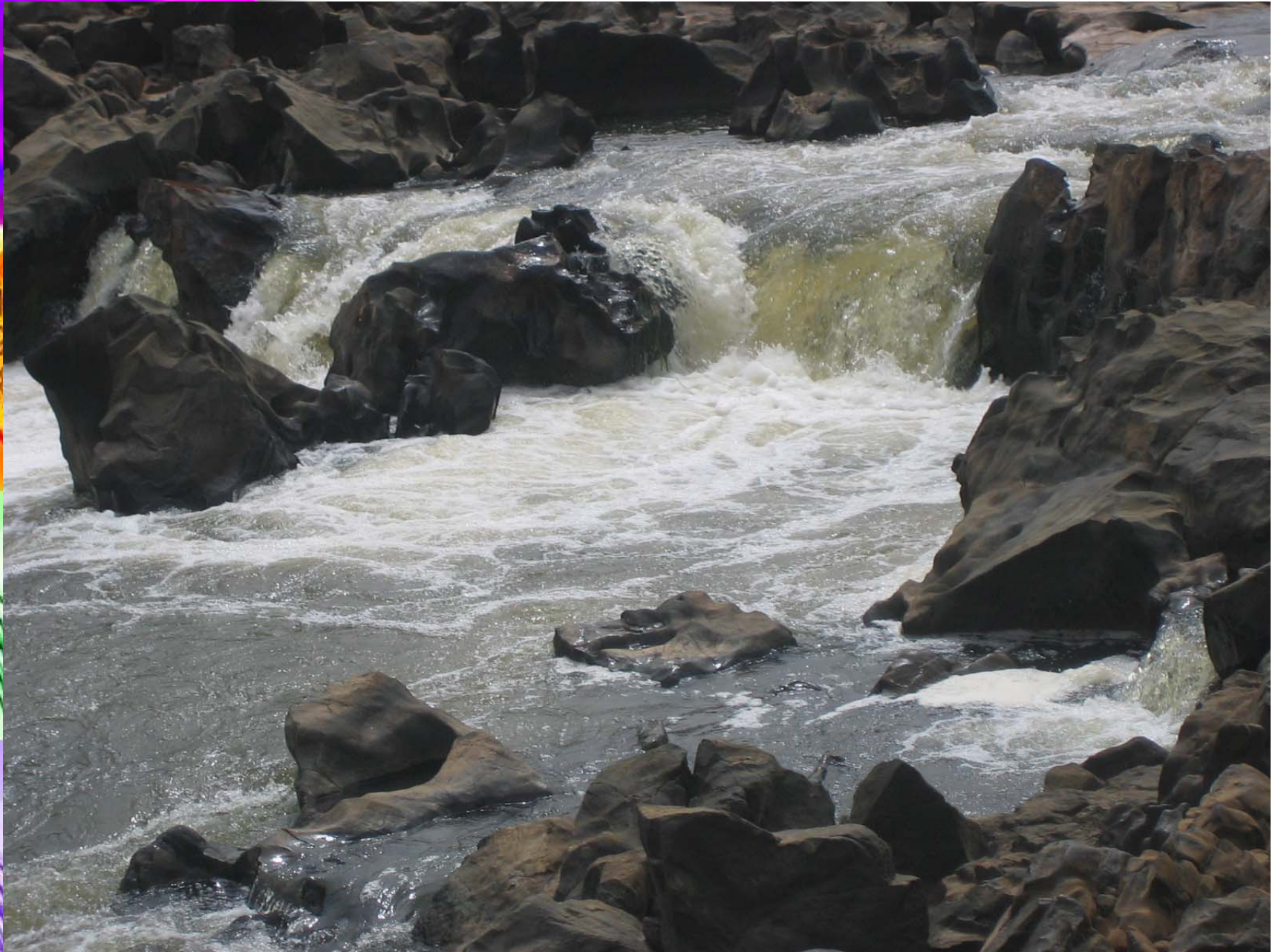
- REF is entering Co-Finance Stage
- Grid and Off-Grid Integration/Coordination is becoming an issue
- REF is focusing on Renewable Energy Resources

















## 6.Trends

- Off-Grid Electricity demand growing
- Involvement of Local Banks and MFIs is becoming timely
- Off-Grid RE is becoming demand driven electricity business



## 7. Challenges

- WB/IDA committed fund is small compared to the projects in the pipeline and the disbursement procedure is discouraging
- Banks in Ethiopia are not aware/interested in Off-Grid RE
- Grid and Off-Grid RE are not at a level playing field



## 8. Solutions

- Secure international concessionary financing, national development financing and commercial financing
- Create forums of awareness creation with Local Banks and MFIs
- As much as possible efforts have to be made to bring Grid and Off-Grid to similar playing field

## 9. Conclusions and Recommendations

- Off-Grid RE has to be clearly recognized as a natural complimentary to Grid RE
- EEPCo and EREES have to work more closely to Maximize the impacts of Grid and Off-Grid RE activities in the country
- Regional Governments need to strengthen their energy bureaus to benefit more from Grid and Off-Grid RE activities





**Thank You !**