The role of Non-Governmental Organizations a case of GIZ Energy Coordination Office

"Information and Communications Technology for Environmental Regulation: Developing a Research Agenda"

Workshop

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Outline

- Ethiopia at glance
- GIZ Energy Coordination Office (ECO) and its approach
- Energy Sector Mapping and Database (ESMAD)
  - What is ESMAD?
  - Objectives and current situation
  - What is the role of GIZ ECO?
  - Challenges and lessen learned

Ethiopia

Federal Democratic Republic of

Total Population 2012 : 8.5 million (2nd in Africa)

Population Density: 76.4/km2

Area: 1,104,300 km2 (27th)

Overview of GIZ Energy Coordination Office (ECO)

- **Commissioned by:** German Federal Ministry for Economic Cooperation and Development (BMZ)
- **Co-financed by:** Irish Aid
  Netherlands Directorate-General for International Cooperation (DGIS)
  Norwegian Ministry of Foreign Affairs
- **Partner organisations:** Political partner: Ministry of Water and Energy
  Implementing partners: Environmental Protection Authority, Ethiopian Energy Agency, Ministry of Agriculture, Ministry of Health,Non-Governmental Organisations and others.
- **Objective:** Conditions in Ethiopia's energy sector have improved. Lower-income households, social facilities and small and medium-sized enterprises in particular have sustainable access to modern energy technologies and services.

OUR APPROACH

- **Renewable Energy Technology Development:** developing and disseminating small solar and hydropower plants and energy-efficient cookstoves.
- **Renewable Energy Market Development**: improving access to a modern energy supply by developing markets for renewable energies and promoting the private sector and local economic capacities in rural regions.
- **Policy, Strategy and Communications:** advising the Ethiopian government on energy policies, strategies, laws and programmes; involving civil society and the private sector in the energy debate.

ENERGY SECTOR MAPPING AND DATABASE DEVELOPMENT FOR ETHIOPIA (ESMAD)

- ESMAD is an energy sector database management system that is:
  - Internationally compatible;
  - GIS enabled; and
  - Web based.(hosted on MoWE website)
- ESMAD project is initiated by Ministry of Water and Energy as owner and is funded by the GIZ Energy Coordination Office
- It integrates federal and regional level energy data management features;
- First phase completed in July 2012;
- GIZ has financed the implementation of phase I with over ETB 4.3 million approximately EURO 200k;

ESMAD Objectives

- **ESMAD aims at developing a web-based and GIS-enabled energy database and at updating the country's energy sector data. Specifically, the project is expected to:**
  - Contribute to the development of a national and regional energy sector database.
  - Facilitate access to up-to-date information on the energy sector.
  - Contribute to local capacity building in energy database management.
  - Facilitate energy sector stakeholder's coordination and exchange of information
  - Expedite energy policy development, planning and coordination within the energy sector through the provision of up-to-date and reliable data.
  - Contribute to private sector development and participation in the energy sector.

ESMAD current phase outputs:

- User friendly energy database is developed and has become operational.
- Updated most energy sector data at federal and regional levels;
- National energy data has been collected mainly on the supply side that includes electricity, biomass, renewable energy, and hydrocarbons
- Have built the capacity of personnel working in the field and will be fully managed by the respective regional energy offices, coordinated by MoWE at federal level.

The Role of GIZ ECO

- Support financially and advise the government of Ethiopia to articulate energy data using ICT.
- Building local capacities and coordinate stakeholders.
- Hirer and manage a national energy consulting firm, to contracted and coordinate the implementation of all ESMAD activities.
- Provide inputs in ICT so that it will be utilised to advance inclusive energy data development .

Challenges

- ESMAD very extensive and wide coverage, requiring the collaboration of federal and regional energy agencies, most of which lack resources – human and financial;
- The coordination of various agencies demanded far more resources than expected;
- Energy data, primarily biomass had to be collected from scratch, which added the burden on the project ;
- The local experts has limited basic ICT resources and required skills to handle the ICT equipment.

Lesson Learned

- More effort needed in bringing partners together, especially in establishing working relations with Central Statics Agency and the regions;
- Sufficient budget and training especially for regions;
- Regional data collection requires:
  - Close follow-up and frequent backstopping;
  - Regional presence of ESMAD;
  - Synchronized regional training immediately followed by data collection.

Lesson Learned …contd

- Further improve the energy database and enhance its user friendliness – harmonize with regional databases and build more GIS features, further testing;
- Further meet equipment (hardware and software) requirements;
- Further build staff capacities to ensure continuity and smooth energy database management system;
- Establish strong working relations with CSA, the regional states, and other partners.
- Ongoing capacity development interventions can strengthen the potential of ICT-based energy data documentation at local level.

"Resource mapping is a crucial step in providing the resource and policy certainty that commercial developers need to scale up investment in renewables."

Oliver Knight
Senior Energy Specialist, World Bank

Any Question?