

Capacity & institutional strengthening for rural electrification and development - Decentralised Energy Option (CAP-REDEO)

Supported by the European Commission through the Intelligent Energy Europe Agency (IEEA) and French Ministry of Foreign Affairs (MAE)

Intelligent Energy  Europe



The Cap-Redeo project has shown significant progresses over the past 6 months. After 18 months of hard work and fruitful collaboration from stakeholders, CAP-REDEO is now entering in its final phase

This third newsletter will present the tasks achieved for 2008 and will give an update of the CAP-REDEO status up to June 2008 relating to the following steps:
March/April 2008

- 1- National Stakeholders meeting
- 2- Technical Training sessions

June 2008

- 3- Mid-Term workshop
- 4- Training sessions for planners and for Its (Information Techniques' specialists)

The first planning results were finally presented at the Mid-term workshop hosted by MoEM which took place in Vientiane in June 2nd, 2008; most of the training sessions were completed by that date.

Prior to the mid-term meeting, an important National Stakeholder meeting was organised in each capital. This was an important step, before making any simulations on Grid supply options for the 2 provinces; this was done during IED's previous mission in March and April 2008 in Cambodia and Lao PDR.

1. National Stakeholder meetings

Two National level multi-stakeholders meetings were organized in Phnom Penh (Cambodia) on March, 25th 2008 at Imperial garden, villa & Hotel and in Vientiane (Lao PDR) on April 4th 2008 at Lane Xang Hotel.

Several main issues were discussed during those meetings among the multisectoral stakeholders group such as:

- 1/ Validation of Spatial Analysis results.
- 2/ Presentation of the GEOSIM Load Forecast module results. (Reports were distributed for the meeting).
- 3/ Grid supply options strategy, assumptions and key parameters were fixed for each country.

The meeting outcomes were key points for the following step which is to establish the rural electrification plan. Parameters to be used as inputs for the GEOSIM Supply Options module were discussed: level of electrical equipment, tariffs, power purchase prices, number of clients connected per km of LV line . It was also decided that 2 main scenarios would be studied and their hypothesis were part of the debate. (One low and one high scenario).

Finally, the National level GIS database was delivered on CDROMs at the end of the meeting, to each stakeholder institutions.



Coordinator: IED



Partner: ETC Energy

Capacity & institutional strengthening for rural electrification and development - Decentralised Energy Option (CAP-REDEO)

Supported by the European Commission through the Intelligent Energy Europe Agency (IEEA) and French Ministry of Foreign Affairs (MAE)

Intelligent Energy  Europe



2. A 3 days training sessions on Spatial Analysis, Load Forecast and Advanced GIS techniques

A specific training session was carried out by IED for each country for 3 full days following the National Stakeholder meetings.

The Cambodian training was organized in EDC training centre from March 26th to 28th 2008 and gathered 10 participants from MIME, DIME, EAC, EDC and REF.

The Lao training session organized in Vientiane from April 7th to 9th 2008 was attended by 14 participants from EDL and MEM members from both Vientiane and Khammuane province.



Dedicated to planners and ITs, the training objectives were to:

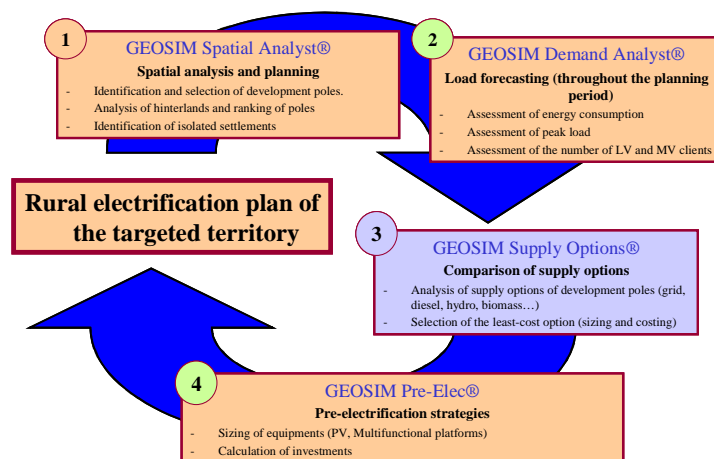
- Develop a better understanding of GEOSIM Load Forecast and Spatial Analyst modules
- Acquire a Practical knowledge of GEOSIM
- Learn how to analyze results and sensitivity factors
- Learn how to edit results through GIS maps, reports (with GEOSIM)....

3. Mid-Term Workshop

On June 2nd 2008 a second main workshop was held in Vientiane at Lane Xang Hotel with stakeholders from both countries involved with CAP-REDEO (Cambodia and Lao PDR).

Around 20 participants representing amongst others several ministries, the national electricity utilities and in Cambodia the regulator and Rural Electrification Fund, were present to attend this first presentation of final results from planning simulations generated by GEOSIM© the planning tool developed by IED.

After completing the first steps of the rural electrification methodology during the above mentioned national multi-sectoral stakeholders meeting, some projects were created and evaluated.



Based on hypothesis, parameters and assumptions discussed over the past sessions, documents presenting the results developed by the IED team for Cambodia and Lao PDR were distributed to each delegate.

Capacity & institutional strengthening for rural electrification and development - Decentralised Energy Option (CAP-REDEO)

Supported by the European Commission through the Intelligent Energy Europe Agency (IEEA) and French Ministry of Foreign Affairs (MAE)

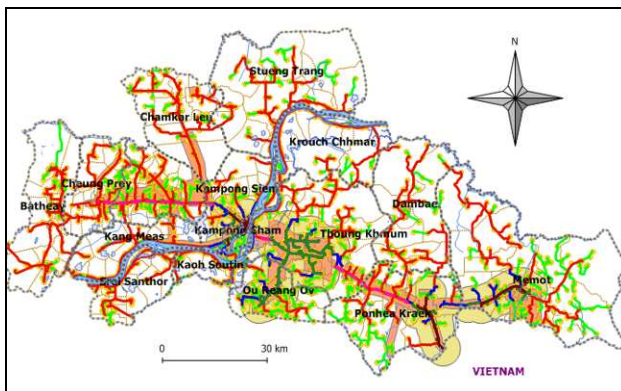
Intelligent Energy  Europe



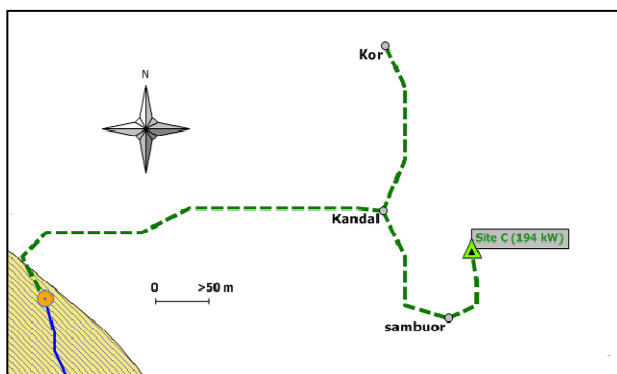
For Cambodia, simulations were done in 3 phases:

- 1/ Grid extension simulation for the whole province of Kampong Cham.
- 2/ Grid extension simulation to evaluate some planned new extension projects within the Kampong Cham province – which could be taken up by private investors
- 3/ Grid supply options from Biomass and hydro potential and some Genset options.

GEOSIM produced maps and reports, providing detailed information on investments, MV line locations and list of settlements likely to be electrified. .



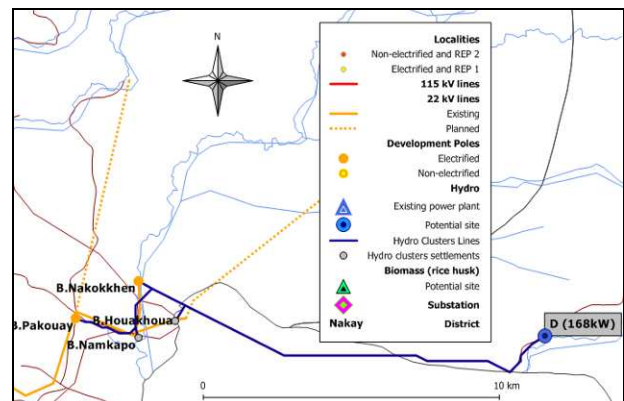
Draft for Kampong Cham Grid Extension simulation by 2020



Draft for Biomass project map in Kampong Cham

The document reports all the investments required to start a selected grid extension project using an efficient cost/benefits methodology.

Concerning Khammuan province (Lao PDR), it was decided to focus mainly on Biomass and Hydro potential to get some projects figures and maps.



Hydro potential site development draft in Khammuan

As EDL grid electrification is well developed in Khammuane Province, projects are studied in both modes: isolated mode and grid integrated mode (energy produced by the generator can be sold to the utility). This exercise remains quite theoretical concerning biomass potential as detailed information on biomass residues was difficult to access. For simulation purposes, IED identified some areas where rice husk production is important based on statistics and geographical methods.

The workshop was also the opportunity to deliver to each partners the final GEOSIM software (version 3.5) which integrates the latest improvements.



Coordinator: IED



Partner: ETC Energy

Capacity & institutional strengthening for rural electrification and development - Decentralised Energy Option (CAP-REDEO)

Supported by the European Commission through the Intelligent Energy Europe Agency (IEEA) and French Ministry of Foreign Affairs (MAE)

Intelligent Energy  Europe



A specific morning training for planners took place the day after. Dedicated specifically to decision makers, the purpose of this short and intensive training was to give a quick and practical insight of GEOSIM software to “non GIS specialist” final users. A small study area was selected and participants went through all the steps to finally complete a rural electrification plan on this selected area and edit results and maps by themselves.

4. Provincial technical training

In addition, a technical training session took place at the provincial capital of each country for 2 days. It was also an opportunity to have a discussion with provincial stakeholders to discuss about produced results.

The first session took place in Thakek (Khammuane province) at the department of Energy and Mines office from June 5th to 6th 2008.

7 participants attended to this training which summarised the full methodology for rural electrification (used as well by GEOSIM©)

The above training program focused on practical exercises:

- Understand the GEOSIM supply options module concepts
- Update the model data and parameters and run it
- Analyze Supply options module results
- Review the whole planning methodology and prepare a new plan

The same training session hosted by the Provincial Department of Industry, Mines and Energy took place in Kampong Cham (Cambodia) from June 9th to 10th 2008 for 7 participants as well.



Capacity & institutional strengthening for rural electrification and development - Decentralised Energy Option (CAP-REDEO)

Supported by the European Commission through the Intelligent Energy Europe Agency (IEEA) and French Ministry of Foreign Affairs (MAE)

Intelligent Energy  Europe



Bio digester in Kampong Cham



Microhydro in Lao PDR

For more information, please contact:

IED - Innovation Energie Développement

ied@ied-sa.fr

<http://www.ied-sa.fr>

<http://www.ied-asean.com>

ETC Energy

energy@etcnl.nl

www.etc-energy.org

Visit website: www.cap-redeo.com

Disclaimer

This document has been produced with financial assistance of the European Community and the French Ministry of Foreign Affairs. The views expressed herein are those of the project team and can therefore in no way be taken to reflect the official opinion of the European Community or the French Ministry of Foreign Affairs



Coordinator: IED



Partner: ETC Energy