

**Proposals from Mr. Manuel S. Ogena, Lead Country Coordinator (RAS/8/092)**  
**Himalayan Sub-regional Collaboration for Geothermal resources assessment**

Himalayan belt is an active tectonic belt with earthquakes frequently. There are a lot of geothermal manifestations along the Himalayan belt, from Pakistan to Thailand. Geothermal manifestations are known at Tattapani and Murtazabad of Pakistan, Puga and Tapolan of India, Yangbajain of China as well as many hot springs in Thailand.

The Himalayan belt is an inaccessible area and devoid of regular energy source. The hydro-electric power development causes stability problem besides the adverse environmental impact in the ecology of the Region. Migration of large population to higher altitude, economic activity, e.g. tea garden, has put heavy demand for energy in this area.

Though, these geothermal resources are known for the past few decades, systematic assessment of the potential of these prospects is still awaited. Considering the increasing need for green energy source in remote hill tracts of the Himalayan, it is proposed to initiate a regional project for assessment of the potential of geothermal sources in Himalayan belt, covering China (Lead Country), India (Asstt. Lead Country), Pakistan and Thailand. China has already developed some geothermal fields in Tibet Area for both electric and non-electric purposes and is progressing to develop more fields. The other countries having similar geothermal manifestations in the Himalayan Belt can benefit from the experience of China.

The regional project may include the following parts:

- Correlation of geology to access possible similarity in geothermal source.
- Geochemical survey (hydrological data) and isotopic data, gas analysis.
- Conceptual modelling based on isotopic and geochemical data.

The project may be of duration of three years at the end of which final report will be submitted. The feasibility of development of geothermal prospects may be decided at the end of project and further action initiated for utilization of the resources for electricity generation and direct heat uses as feasible.