Mini-Hydroelectric Power Generation at River Guja

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Problem

• When we use diesel propelled engines to pump water or generate electricity it acts as a source of air pollution and the carbon dioxide and other gases produced as fumes could escape into the atmosphere and deplete the ozone layer thereby contributing to global warming.

• Kisii County uses electricity to pump water for her citizens and the water projects have not been able to cover the electricity bills.

• There is need for a cheaper, alternative source of energy in form of either solar or hydroelectric generation since there exists a major, Rive Gucha.
Solution

• Construction and operationalization of a mini hydroelectric power station at Nyakwana waterfall
• Energy reticulation initiatives
• Metering
Needs

• Feasibility study report with UN Habitat – Dr. Vincent Kitio
• Check the regulatory requirements
• Designs for the project
• Public participation
• Acquire the machinery
• Capacity building of personnel
• Construction and implementation
• Energy reticulation
• Handing over of the project
Benefits

- Electricity for households
- Green energy production
- Reduced cost of operations e.g. water pumping
- Employment creation at all stages of the project
- Reduce carbon emissions and other green house gas emissions from the conventional use of fossil fuel based energy sources
- Improved livelihoods for members of the surrounding community