DM2009 Project Summary

Project Number: 3712 Booth Number: 40

Floating Power Charger: Providing Light in the Darkness of Climate Change

COUNTRY: Philippines
ORGANIZATION: LAMBS Agri-mechanicals
FUNDING REQUEST: $98,910

OBJECTIVE: To provide light to 2,000–2,400 people by installing 16 floating hydropower generators (FH) and distributing 400 car batteries with lighting systems. The project also aims to plant 100,000 trees per year that will provide additional sources of income for the beneficiaries.

RATIONALE: Millions of people in remote areas of the Philippines are still not connected to electrical grid. Small hydropower generators are being used to provide lights in remote areas. However, most of the existing hydropower equipment requires the construction of fixed structures in the river. Aside from being expensive, the hydropower equipment installed in rivers is vulnerable to floods. With climate change, heavier and more frequent rains and floods are expected; thus it will be risky to use the existing hydropower equipment. There is a need to develop hydropower equipment that can be easily removed from the river when there is heavy flooding.

INNOVATION: Using mostly recycled materials, this project has developed a floating hydropower generator that can be easily removed from the river when too much rain causes a flood. The project also innovates in the use of car batteries that can store power and provide light to households even if there is heavy flooding for two weeks. The project also utilizes an innovative implementation approach by providing light as an incentive for the beneficiaries to plant trees. The trees in turn will stabilize their areas and increase the planters' income, thus reducing their vulnerabilities to climate change.

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