



Green Empowerment

# Case Study: Solar Water Pumping System Amgu-o, Philippines

For full report, download

[http://www.greenempowerment.org/images/Phil2007/amgu-o final report11-28-07.pdf](http://www.greenempowerment.org/images/Phil2007/amgu-o%20final%20report11-28-07.pdf)

October 2008



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## Background

- The Philippines  
83 million people ; 41,936 neighborhoods and villages (barangays)  
30 million rural inhabitants; 41% of them living without access to adequate water & sanitation.
- The task of fetching water is performed by women and children, who spend significant portions of their days walking to and from springs or a stream carrying large containers filled with water of questionable purity. This contributes to spinal and other muscular problems. The time spent hauling water takes away from time that could be spent in other productive or leisure activities. Children could be in school or doing homework, and women could be performing other duties such as cooking, tending gardens or caring for elderly family members; all of which are tasks usually performed by the females of the community.
- The villagers of Amgu-o are indigenous Blaan, who have been put down by farmers in the more fertile valleys. Helping them to develop their community bring them a renewed sense of pride in what they can accomplish.

[1] Information on Philippines provided from UNICEF "At a Glance: Philippines" <http://www.unicef.org/infobycountry/philippines.html>

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## Case Study: Philippines Amgu-o Solar pump

<p>GE role: grant application assistance</p>	<p>Helped formulate budget and proposal from partner. Obtained \$100,000 from GVEP for solar pump + 2 livelihood projects. Lead time ~ 1 year</p>
<p>YAMOG role: community selection &amp; preparation, needs &amp; topographical survey gravity distribution design/install</p>	<p>Changed from initial grant target, settled for less water than WHO guidelines, great PC CAD design &amp; BOM analysis Revised TDH by 20% just before purchase!</p>

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<p>GE role: Technical consulting</p>	<p>Feasibility analysis, preliminary sizing. Sent 3 international requests for quotes &amp; discussed offers;</p> <p>coached, discussed &amp; documented rationale for choice</p> <p>negotiated rebate when price increased, got revised estimates when field data changed</p>
<p>YAMOG role: hardware import, receiving, logistics community labor planning, housing, etc.</p>	<p>Tried to get import tax exemption – 2 months delay Navigated import &amp; processing paperwork &amp; fees Inspected goods at pier, purchased all additional parts, Recruited skilled &amp; non-skilled laborers</p>

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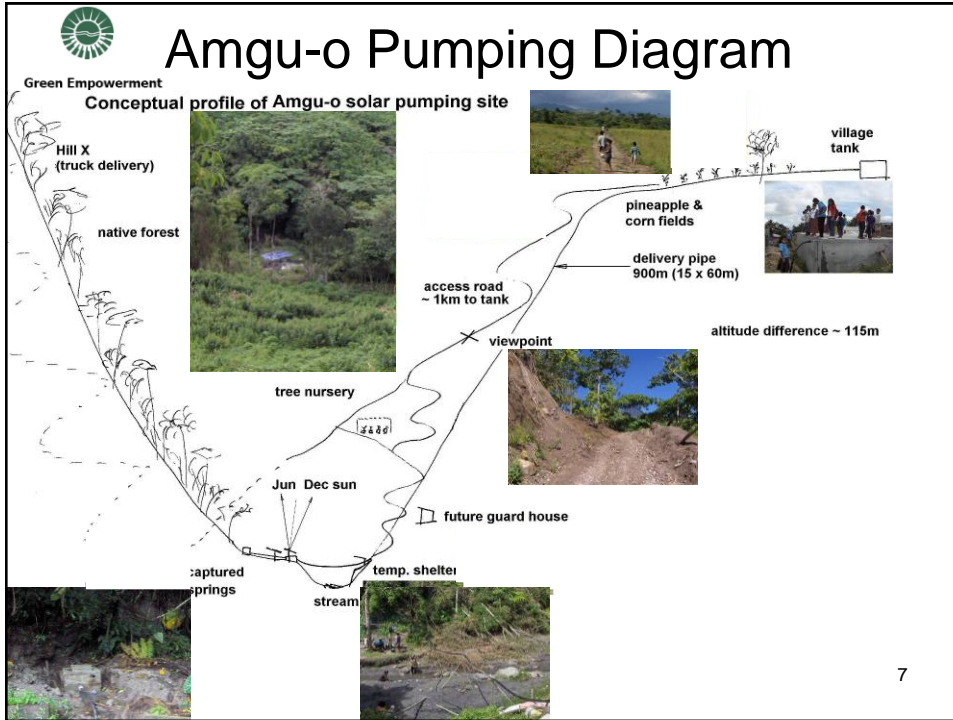


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<p>GE role: Technical implementation/ commissioning</p>	<p>Delivered tech training (refresh) to partner, helped understand I, O&amp;M manual guided decisions on field implementation specifics, wrote site-specific user instructions &amp; troubleshooting, trained local operators + informed community</p>
<p>YAMOG: Consolidated reporting to GVEP</p>	<p>GE: provided detailed SPS implementation report</p>

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