



Micro hydro, Indonesia

This micro hydro plant makes use of the natural flow of water to generate sustainable power for the island of Sulawesi, without the need for a retaining dam.

Location



The project is located on Sulawesi's Minahassa peninsula, in Mobuya village, at an altitude of 800 m above sea level. The hydro plant is fed by the Poigar river coming from the mountainous forests above the village.

Project



The project is utilizing the natural fall of water between the upper Moaat lake and the lower Iloloy lake to generate low impact sustainable energy. The hydro plant has an installed capacity of 3MW only, making it heavily dependent on additional funding from carbon revenues.

Beyond the provision of the region with clean energy that replaces fossil fuel fired power, the project is also concerned with saving local landscape and nature. Upstream of the hydro station, trees have been planted to stabilize the river banks and reduce erosion and improve the soil's water capability, thus securing local water supply.



In addition, the local population benefits from the small hydro plant. During the construction phase, most of the building material (except for the penstock) was bought in the region. Heavy machinery in this sensitive environment was avoided during construction, generating an over-average level of temporary employment, thus providing about 200 people with safe income. In the operational phase, about 20 locals are employed as technicians. The power plant management is in female hands which makes for a strong signal of gender equality.

This microhydro plant serves as a good example for sustainable development in a remote region, at the same time benefitting global climate and local communities.

Project achievements



Socio-economic benefits

- During the construction phase, the project generated considerable job opportunities for about 200 locals.
- About 20 permanent jobs were created for the operation of the plant. Workers received training on modern equipment and thus benefit from technology transfer.
- The project owner invested in the improvement of local infrastructure, e.g. by road and bridge construction as well as maintenance works, thus strengthening local economic opportunities.



Environmental benefits

- The project owner planted trees up the river to stabilize the river banks and reduce erosion, thus improving the soil's water absorptive capacity and securing long-term water resources for farmers.



Checklist Project 300322



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|--------------------------------------|---|
| ✓ Additionality and permanence: | according to the rules of the VCS |
| ✓ 3 rd party verified:: | by TÜV Nord |
| ✓ Transparency: | provided by Markit Environmental Registry |
| ✓ Annual CO ₂ -reduction: | 8,500 tCO ₂ e |
| ✓ Social and environmental benefits: | as documented in our database |
| ✓ Marketing material: | high resolution pictures available |

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