TerraClear Ceramic Water Purifier Project in Lao PDR

General Summary

Problem Statement: According to the Lao Social Indicator Survey II report published in June 2018, the average percentage of households with E.coli found in their drinking water was 86.3%.

Therefore, many people in Lao PDR are at risk of getting diarrhea or other waterborne diseases. To make the water safe for drinking, many families boil it, using wood, charcoal or other biomass, which comes from non-renewable sources. In addition, many families cannot afford the time or money to acquire fuel and so continue to drink unsafe water.

Solution Statement: TerraClear is a social enterprise, registered as a private limited company under the Ministry of Industry and Commerce. The enterprise addresses the problem of limited access to safe, clean drinking water through sale of the Lao Ceramic Water Filter (CWF). CWFs help people, especially in rural areas, to:

- Reduce time spent collecting firewood or preparing drinking water
- Reduce costs for families
- Increase productivity

Ceramic Water Filters provide for removal of microorganisms from water by gravity filtration through porous ceramics. The CWF can filter up to 55 liters per day and store up to 36 liters of safe water in the receptacle tank.

Ceramic Pot
Lid
Spigot
Receptacle Tank

This technology is well documented and is proven to function very well in Lao PDR.

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In addition to providing safe drinking water to users, the CWF also reduces the demand for firewood or charcoal used to boil water for drinking, and therefore reduces greenhouse gas emission and helps to conserve the natural forest. The Lao Ceramic Water Filters are manufactured locally in Lao PDR and contribute to building a local industry, adding value and creating sustainable jobs and business opportunities in rural areas.

**Project Evaluation:** The Gold Standard organization ([https://www.goldstandard.org/](https://www.goldstandard.org/)) was established in 2003 by the World Wildlife Federation (WWF) and other international NGOs to ensure projects that reduced carbon emissions featured the highest levels of environmental integrity and also contributed to sustainable development. Gold Standard operates a best practice standard for climate and sustainable development interventions to maximize impact and create value for people around the world and the planet we share.

The “TerraClear Ceramic Water Purifier Project in Lao PDR” (GS2095) has been developed as a carbon finance project and registered under the Gold Standard since July 2014. The first crediting period of the project was 7 years (July 2012 to July 2019), while the second crediting period of the project is expected to be 7 years from July 2019 to July 2026.

With the assistance of carbon finance, TerraClear will continue to be a unique and sustainable enterprise capable of providing emissions-free household water treatment options to rural households, thereby improving public health, contributing to household economy and helping conserve forest areas in Lao PDR.

**Stakeholder Feedback:** TerraClear is consulting stakeholders for their opinions/comments for the 2nd crediting period implementation. For this new period, TerraClear will continue to produce and sell water filters which will contribute to the sustainable development goals (SDGs) as listed below:

- SDG1: save fuel (wood/charcoal), time and money for Lao people
- SDG3: reduce indoor air pollution (less smoke in the kitchen)
- SDG6: provide safe drinking water
- SDG8: create new local jobs in a safe and healthy work environment
- SDG13: reduce greenhouse gas emission to help avert climate change

Please send your comments using our Google form at: [https://bit.ly/3yjmelO](https://bit.ly/3yjmelO). Further contact information is below:

- Website: [https://www.terraclear.org/contact/](https://www.terraclear.org/contact/)
- Email: info@terraclear.org or jringger@terraclear.org
- Gold Standard: help@goldstandard.org
- Phone: +856 (0)20 5637 4888
- Address: TerraClear Production, Km 10, Road 13 South Pakse Lomsakneua Village, Bachiang District, Champasak Province, Lao PDR