Pilot sites in energy from coffee waste show good results

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Nicaraguan coffee farmer, Fátima Blandón, cooking with biogas. Yalí, Jinotega, Nicaragua

Latin America produces around 70 percent of the world's coffee, but there is a hidden price we have to pay in threats to clean environments and community health. Coffee production generates a great amount of wastewater, which is released untreated into rivers, affecting aquatic fauna and flora and downstream communities. A key problem is that

coffee wastewater comes along with tons of organic waste and high toxicity, which affects the soil and generates greenhouse-gas emissions, particularly methane. An international push to address the health and environmental problems caused by coffee wastewater may now turn out to be a milestone in tackling the issue, with Central American farmers using coffee wastewater to generate energy.

UTZ Certified is a Netherlands-based sustainability program. UTZ Certified's "Energy from Coffee Wastewater" project, according to reports Wednesday, has proven it is possible not only to protect water resources but generate energy by treating discharge from coffee mills. UTZ Certified notes such bracing factoids as how a cup of coffee requires 140 liters of water to be produced and how over 70 percent of water used in Latin America is returned into rivers without being treated.

Han De Groot, executive director at UTZ Certified, said, "Rural communities and coffee production depend intrinsically on a ready supply of fresh water. So if we want to talk about coffee produced in a sustainable manner, then wastewater must be treated when released into the environment." As for generating energy from the waste, the UTZ project report stated that newly installed water treatment systems are at work, where "Methane generated by the waste water is captured in the system, providing a clean and safe biogas for farmers to run pulping machines, heat kitchen stoves and other appliances.".This lowers the carbon and water footprint of coffee production, added the report..

Its coffee wastewater treatment systems have been installed in eight coffee farms in Nicaragua, 10 in Honduras and one in Guatemala. Among the benefits have been the generation of a significant amount of biogas and prevention of the release of greenhouse-gas emissions into the atmosphere. Expansion of the initiative is on the group's wish list. The report said that the initiative is ready to progress from pilot project to further expansion in and beyond Central America.

Environmental concern over coffee processing wastewater has been ongoing for some time. Global Coffee Report in 2012 indicated that interest was beginning to mount. "Wastewater has long been one of the most damaging by-products from coffee processing. Researchers are starting to take an economically-focused approach to provide incentives for plants to deal with these dangerous effluents." Ken Calvert, a retired energy and wastes treatment engineer, explained in the article that "The effluents from washed and semi-washed methods are loaded with organic matter and high in toxicity. The results can lead to degradation of the level of oxygen in water, which can kill off virtually all aquatic life."

More information: www.utzcertified.org/images/st … ste-exec-summary.pdf
www.utzcertified.org/newsroom/utz-in-the-news

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