



Feed the Future Country Fact Sheet

Online Version: <https://feedthefuture.gov/article/reclaiming-refuse-help-generate-reliable-power>

Reclaiming Refuse to Help Generate Reliable Power

Energy and agriculture are closely linked: reliable access to affordable power is a key component to developing a country's agriculture sector and giving agriculture-based businesses a chance to grow. That's why Feed the Future is working in Liberia to reverse decades of devastating civil conflict and rebuild a sustainable energy infrastructure that can support better market opportunities for smallholder farmers and agricultural processors.

After fourteen years of war, all sectors of Liberia's economy were heavily damaged. By the end of the conflict in 2003, Liberia was not producing a single kilowatt of electricity for the entire country, and even today, only about 10 percent of the capital city of Monrovia is on the public electric grid. Outlying rural communities depend on privately owned gasoline or diesel-driven generators for their electricity, which makes Liberia one of the most expensive and environmentally unfriendly electricity generation systems in the world.

To address this serious challenge to development, Feed the Future is working to expand the use of renewable energy to rural areas of Liberia where agriculture is concentrated. Since June 2013, the U.S. Agency for International Development's program to support Liberia's energy sector and its flagship Feed the Future program in the country have been working with the Government of Liberia and local partners to establish a biomass energy center that can turn palm oil, palm nut and coconut shell byproducts, among other types of organic refuse, into an affordable and reliable supply of electricity. The pilot center is based at the Booker Washington Institute (BWI), Liberia's first vocational and agricultural school.

Biofuels not only have the potential to displace carbon emissions from fossil fuels that contribute to climate change, but they are also significantly more accessible to smallholder farmers in remote rural areas who are already growing the crops (like palm and coconut) whose byproducts can be converted into fuel through a process called gasifying. With the right infrastructure, organic biomass can supplement the use of fossil fuel to help bring costs down in the agriculture sector. The gasifiers have already allowed BWI to complement its other sources of energy with renewable energy.

This innovative technology shows promise for agricultural processors in particular who cannot regularly afford costly fossil fuel for generators to power processing equipment. As the model is increasingly adopted in Liberia, Feed the Future will promote private sector investment that can expand access to affordable and renewable energy for some of Liberia's most vulnerable populations.