Welcome to Spotlight. I’m Robin Basselin. And I’m Ryan Geertsma. Spotlight uses a special English method of broadcasting. It is easier for people to understand no matter where in the world they live.

Nguyen The Dong had a problem. He is a farmer in country of Vietnam. He owns many animals: 100 pigs, 100 baby ducks and even a large buffalo. Dong’s problem was too much animal wastes. It smelled. It was dirty. And it created living conditions that were bad for human health. Dong did not know what to do with all the wastes. Nguyen Thi Huong also had a problem. Like Dong, Huong is from Vietnam. But her problem was different. Huong cooks meals for her family. She explained her problem to Alertnet news. Cooking was a difficult and dangerous job for me. The room where I cook was smoky. Black particles would come out of the stove. They came from the wood I burned as fuel. The black ash would make me cough or expelled air from my lung the whole day. The black ash would also cause pain in my eyes. Dong and Huong had 2 very different problems. However, they found the same solution - A biogas system. Today’s Spotlight is on the award winning of Vietnam biogas program.

70% of people in Vietnam live away from cities. They live rural areas. Like Dong, most of these people earn money by caring for farm animals like pigs. Other common jobs are crop farming and fishing. For many of these farmers and fisherman, animal and plant waste is still a problem. And like Huong, many women and children cook milks using traditional cooking fuels. They suffer the same health concerns. They also spent many hours collecting wood and other materials to burn. This process takes time and also uses a large of natural resources. But a biogas system can solve all of these problems. It can turn animal or plant waste into valuable resources such as cooking fuel, electricity and plant food. It works like this: first, an expert must build a system of pipes and tanks. This biogas system contains and manages the decaying process of animal or plant waste. To use the biogas system, a farmer must move animal waste into a pipe with water. Experts can also build pipes to carry human waste from homes. These pipes bring the waste to a tank buried in the ground. This tank is called a bio digester. Air cannot enter this tank. In this contain environment natural bacteria decay the waste material. As the waste decays in the bio digester it produces 2 things: biogas and slurry. The biogas rises to the top of the tank. The pressure from the gas pushes the liquid slurry into another tank. Now people can use both the biogas and the slurry. The slurry is full of rich nutrients. Farmers can add it to soil to help produce healthy crops. The biogas is a form of fuel. Another set of pipes carry the biogas from the bio digester to people homes. They can use this gas as fuel for cooking or producing electricity. Dong explained to Alertnet how biogas helps his family: “I feed the bio digester with animal wastes. Every day, the decaying process produces clean gas for cooking in our kitchen. I also use this gas for light during the night. And I use the gas to boil water for washing or bathing during winter.

A biogas system produces many valuable resources. But it also makes living conditions much cleaner. Containing wastes and declaim process is better for human health.

Biogas systems produce wonderful results for rural communities. However, building a biogas system requires people with special skills. The systems also cost a lot of money to build. This can make it difficult for rural communities to get a biogas system.

So in 2003, The Vietnam Ministry of Agriculture and Rural Development joined with Netherland Development Organization. They started the Vietnam Biogas program to solve this problems.

The Vietnam Biogas program does three things. First, it encourages and teaches rural communities members about biogas systems. Second, it trains local builders to build the system. It also teaches them the business skills. These skills are necessary for starting local biogas building businesses.

Third the biogas program encourages families to buy biogas systems. They do this by offering money grants. However, the program officials only give the money gifts to families after they inspect the biogas system. The biogas program wants to be sure the biogas systems are safe and work correctly.

Information about Vietnam’s biogas program spread quickly. More and more families began buying biogas system and more logos builders began building biogas system.

Nguyen Van Bac owns a biogas system, he is very happy with it. He told the Astern Organization. It is so much cleaner in the house and out. I got a biogas system in 2008 after I saw a neighbor system. It is free energy and it is so much quicker to cook a meal for the family and you did not get smoke in your eyes the whole time cooking.

Mrs. Do Thi Ngoc is another biogas system owner. She told the Astern organization how slurry has helped her family business. This slurry is very good for the tea plants. My son covers the plants with his its regular. The plants grow a lot better as a result and people say it taste better too. Our earning has gone up by about a fifth. The biogas program has been very successful. In the past 9 years, the project had supported the building of more than 114,000 biogas systems. The biogas program has also created many new jobs by training over 2000 skilled builders and workers.

The Vietnam biogas program is not finished working yet. It hope to support the building of 50,000 more biogas system by the end of 2012. This is when the program will officially end. But the good work of the Vietnam biogas program will not stop. The program has giving people in rural Vietnam the knowledge and skills they need to continue building biogas system for many years.

The writer of this program was Corny Scott. The producer was Ryan Geertsma. The voices you heard were from the United States. All quotes were adapted for this program and voiced by Spotlight. You can listen to this program again and read it on the Internet at [www.radioenglish.net](http://www.radioenglish.net/). This program is called biogas systems in Vietnam.

If you have any comments or questions, you can email us at radio@radioenglish.net or you can leave a comment on the script page of this program. You can also find us on Facebook just search for Spotlight radio. We hope you can join us again for the next Spotlight program. Goodbye.